242

JVC

SERVICE MANUAL

MODEL
JR-S200L
STEREO RECEIVER

SEA

No. 2372
MAR. 1976

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1. Specifications

Dimensions : 6-15/16"(H) x 19-11/16"(W) x 13-3/16"(D)
(16cm x 50cm x 33.5cm)
Weight : 21.6 lbs. (9.8kg)

Amplifier Section

RMS Power (Both channels driven)
: 35 watts per channel, min. RMS at 8 ohms
39 watts per channel, min. RMS at 4 ohms
(from 20Hz to 20kHz at no more than 0.5% total harmonic distortion.)
RMS Power (Both channels driven at 1kHz)
: 38 watts per channel at 8 ohms
43 watts per channel at 4 ohms
Total Harmonic Distortion : 0.5% at rated output, 4 & 8 ohms; 0.08% at 1kHz, 1 watt
Damping Factor : 50 at 8 ohms, 25 at 4 ohms
Input Sensitivity, Impedance and Signal to Noise Ratio at Rated Output Power (Unweighted)
: Phono: 2.5mV/50kΩ & 63dB
Aux: 150mV/60kΩ & 84dB
Tape Mon: 150mV/50kΩ & 84dB
Recording Output Level : 150mV (Pin), 30mV/80kΩ (DIN)
Frequency Response : 10Hz to 80kHz +0, −3dB
S.E.A. Center Frequency
: 40Hz, 250Hz, 1kHz, 5kHz & 15kHz
S.E.A. Control Range : ±12dB
Loudness Control Range : 12dB at 50Hz, 4dB at 10kHz

FM Tuner Section

Usable Sensitivity (±40kHz Deviation)
: 1.9μV IHF at 300Ω and S/N: 30dB
Total Harmonic Distortion at 1kHz and 100% modulation
: DIN 45 500
0.2% (Mono), 0.4% (Stereo)
IHF 1975
100Hz: 0.2% (Mono), 0.4% (Stereo)
1kHz: 0.2% (Mono), 0.4% (Stereo)
6kHz: 0.25% (Mono), 0.5% (Stereo)
Signal to Noise Ratio
: DIN 45 500 60dB (Mono), 58dB (Stereo)
Selectivity : 60dB IHF alternated
Capture Ratio : 1.2dB
Image Rejection : 70dB
IF Rejection : 85dB at 98MHz
Stereo Separation
: 35dB at 100Hz, 45dB at 1kHz, 35dB at 10kHz

MW & LW Tuner Section

Usable Sensitivity : MW 50μV; LW 100μV
Selectivity : MW 30dB; LW 30dB
Image Rejection : MW 45dB; LW 35dB
IF Rejection : MW 40dB; LW 40dB
Signal to Noise Ratio : MW 55dB; LW 55dB

2. Removal of Top Cover, Bottom Plate and Front Panel

Procedure and Part Numbers (Top Cover and Bottom Plate)

1. Remove 4 screws (Item No. 4) through the both sides of the cover and one screw (Item No. 2) from the back of the top cover.
2. Remove the top cover.
3. Remove 4 screws (Item No. 7) from bottom plate (Item No. 6) and remove the bottom plate from the chassis.

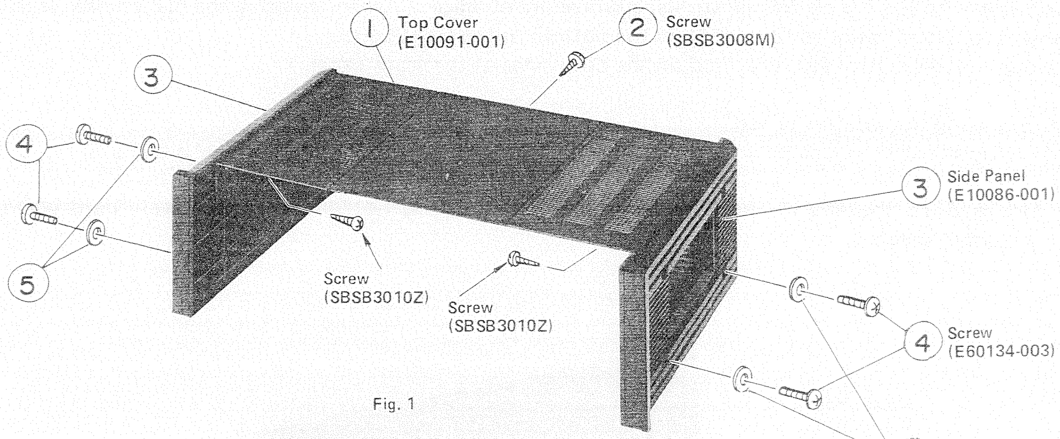

① Top Cover (E10091-001)
② Screw (SBSB3008M)
③
④
⑤
Screw (SBSB3010Z)
Screw (SBSB3010Z)
③ Side Panel (E10086-001)
④ Screw (E60134-003)
⑤ Washer (Q03091-206)

Fig. 1

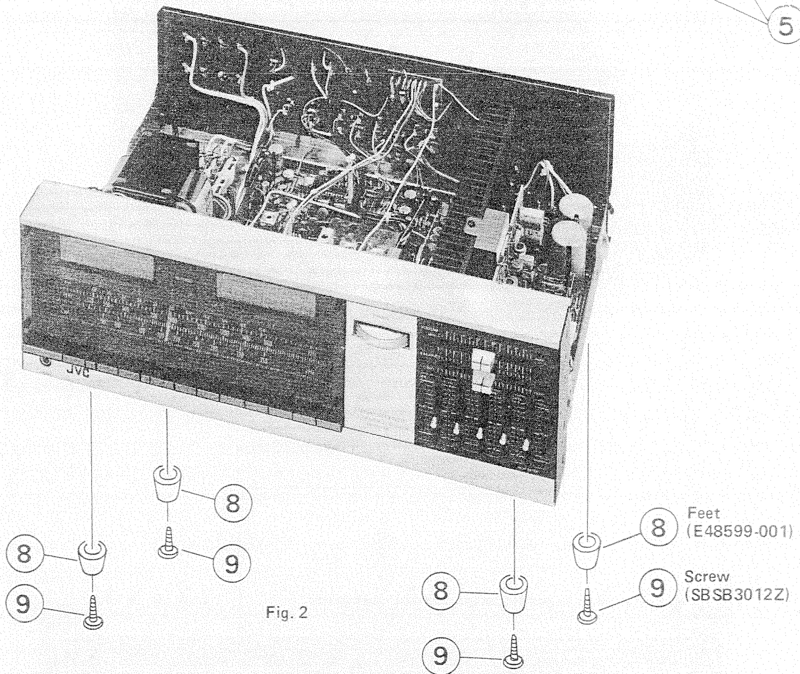

JVC
⑧
⑨
⑧ Feet (E48599-001)
⑨ Screw (SBSB3012Z)

Fig. 2

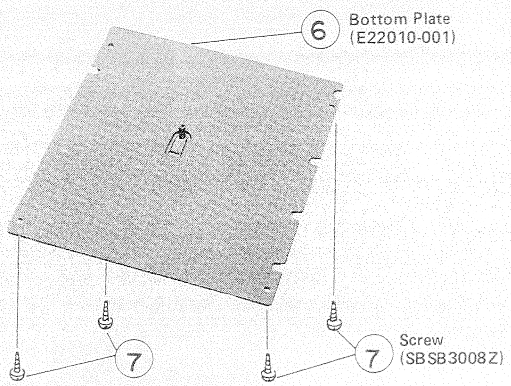

⑥ Bottom Plate (E22010-001)
⑦
⑦ Screw (SBSB3008Z)

Fig. 3

Procedure and Part Number (Front Panel)

1. Remove the top cover. (Refer to the removal of the top cover on page 2.)
2. Remove the dial pointer carefully according to the steps below:
   a. Slide the dial pointer to the center position of the dial rail.
   b. Remove the dial cord from the dial pointer. Do not pull the dial cord strong.
   c. Remove the dial pointer from dial rail carefully.

   Note: Refer to Fig. 11 of the dial stringing procedure on page 7 when replacing the dial pointer onto the dial rail.
3. Remove 3 screws, item No. 2 located on the bottom of the front panel.
4. Remove 4 screws, item No. 1 located on the both sides of the front panel.

In case of removing the window screen

Remove 4 hexagonal screws located on four corners of window screen. Refer to item Nos. 2 and 3 of Fig. 8 on page 5.

Warning: Use a 3/32″ hexagonal wrench to tighten the screws. Do not screw in excessively hard when replacing the window screen.

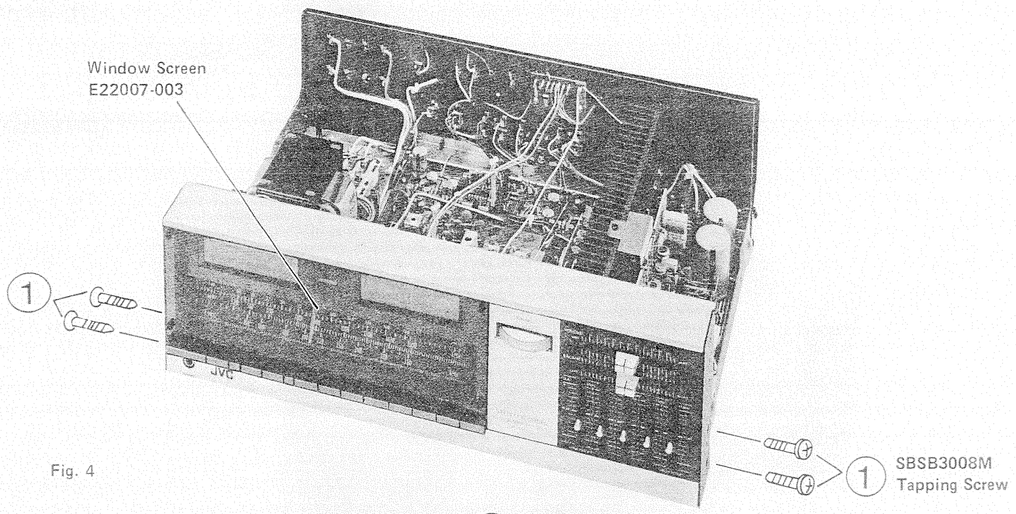


Fig. 4

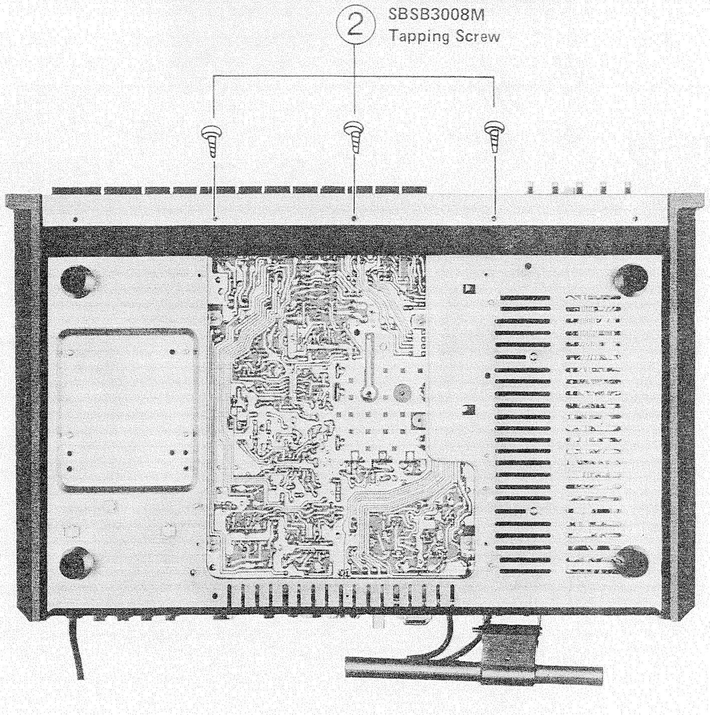
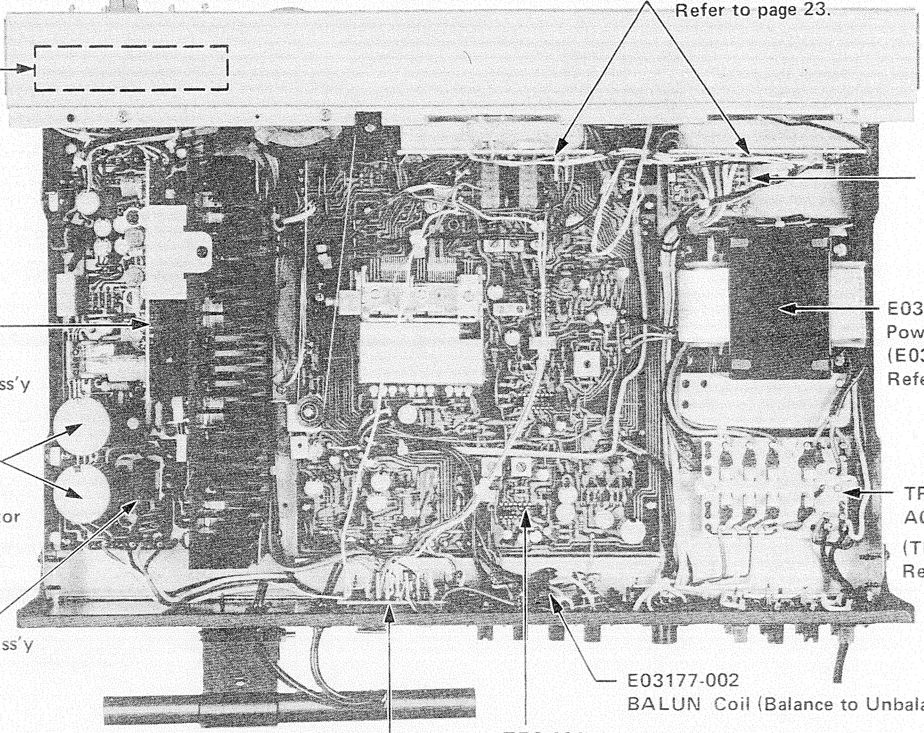


Fig. 5

3. Main Parts Location and Part Numbers

Top View



TPS-52
Lamp C.B. Ass'y
Refer to page 23.

TAC-402C
S.E.A. C.B. Ass'y
Refer to page 30.

TAC-403C
Speaker Switch
C.B. Ass'y
Refer to page 32.

E03077-20C
Power Transformer
(E03077-20CBS for U.K.)
Refer to page 36.

TAD-173B
Driver Amp. C.B. Ass'y
Refer to page 24.

QEW71GH-688
Electrolytic Capacitor

TPS-53M
AC Fuse C.B. Ass'y
(TPS-53NBS for U.K.)
Refer to page 23.

TAP-262A
Power Amp. C.B. Ass'y
Refer to page 27.

E03177-002
BALUN Coil (Balance to Unbalance Coil)

TFC-16A
FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y
(TFC-16B for U.K.) Refer to page 16.

Fig. 6

TRF-33A
Antenna C.B. Ass'y
Refer to page 22.

Bottom View

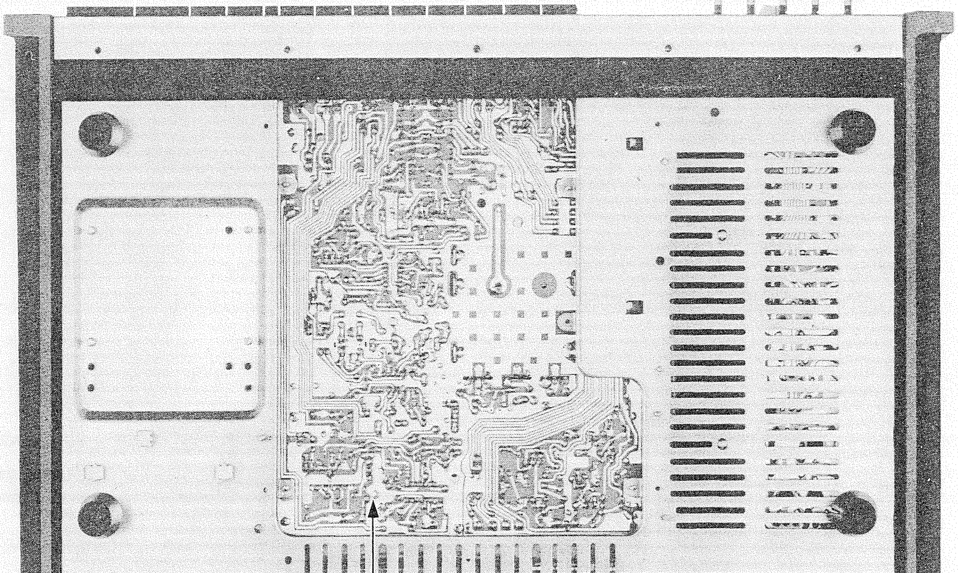


Fig. 7

TFC-16A
FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y
(TFC-16B for U.K.) Refer to page 16.

5. Dial Stringing Procedure

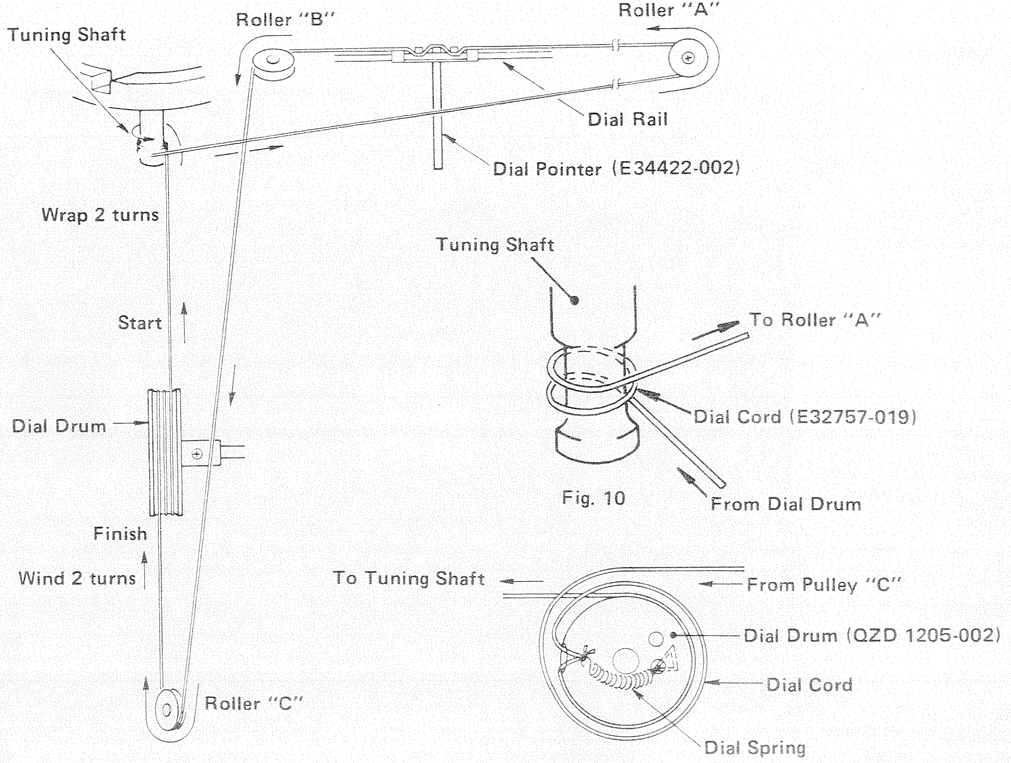

Tuning Shaft
Roller "B"
Roller "A"
Dial Rail
Dial Pointer (E34422-002)
Wrap 2 turns
Start
Dial Drum
Finish
Wind 2 turns
Roller "C"
Tuning Shaft
To Roller "A"
Dial Cord (E32757-019)
From Dial Drum
To Tuning Shaft
From Pulley "C"
Dial Drum (QZD 1205-002)
Dial Cord
Dial Spring

Fig. 10

Fig. 11

Removing heat sink and power amp. C.B. ass'y

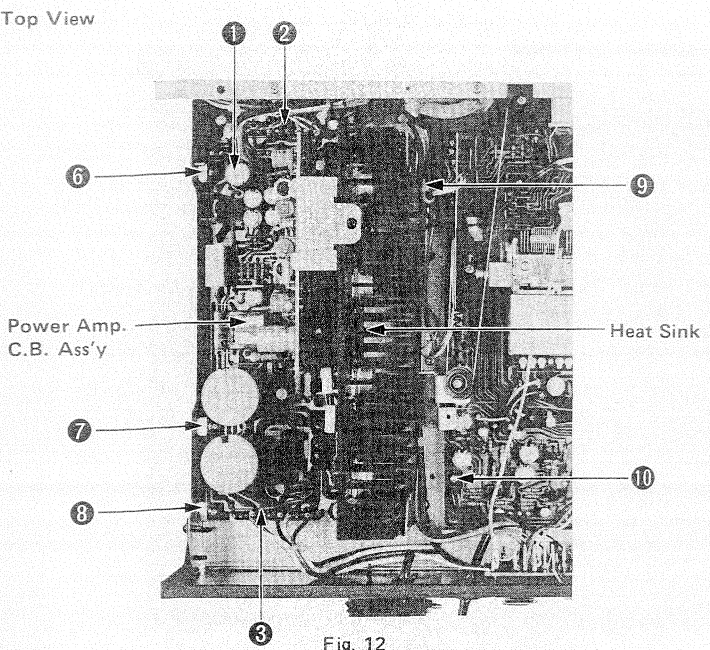

Top View
❶
❷
❻
❾
Power Amp. C.B. Ass'y
Heat Sink
❼
❽
❿
❸

Fig. 12

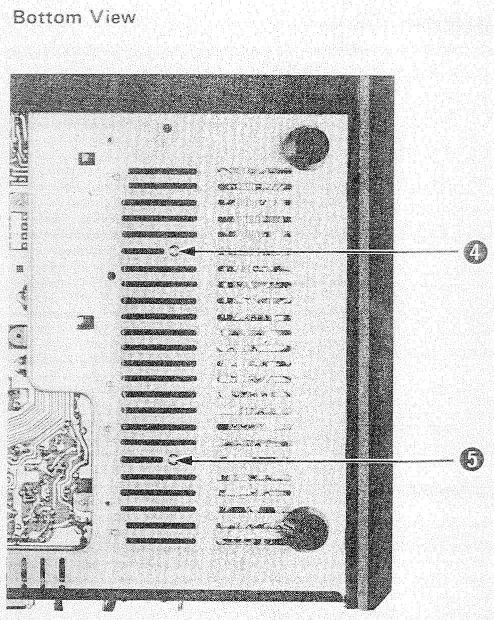

Bottom View
❹
❺

Fig. 13

Remove plugs and screws according to steps below:

Step 1: 3 plugs (Item No. 1, No. 2 & No. 3)
Step 2: 2 screws (Item No. 4 & No. 5)
Step 3: 5 screws (Item No. 6 through No. 10)

(1) Remove heat sink and power supply amp. C.B. ass'y, see Figs. 12 & 13.
(2) Remove dial pointer and old dial cord.
(3) Tie end of new dial cord to one end of dial spring, connect other end of dial spring of bottom right eye inside dial drum, see Fig. 11.
(4) Rotate the tuning capacitor dial drum to its maximum clockwise.
(5) Run the dial cord through the slot in the rim of the dial drum.
(6) Pull dial cord taut and wrap 2 turns counterclockwise around tuning shaft. Refer to Fig. 10.
(7) Guide the dial cord under and around roller "A", around rollers "B" and "C". Keep the dial cord taut during this procedure.
(8) Guide the dial cord over the dial drum and wind 2 turns counterclockwise. See Fig. 11.
(9) Turn the tuning shaft to rotate the dial drum fully counterclockwise and fully clockwise to distribute the tensioning along the dial cord.
(10) Place the dial cord over and under the tabs on the rear of the dial pointer (see detail) and place the pointer on the top of the dial panel rail.
(11) Turn the tuning shaft clockwise. Slide the dial pointer to zero (0) calibration marker on the logging scale while holding tuning shaft fully clockwise. Cement the dial pointer to dial cord to prevent slippage. Allow cement to dry thoroughly.
(12) Reinstall the heat sink and power amp. C.B. ass'y. Reconnect all plugs (removed previously) to their respective sockets. Refer to Fig. 14B.
(13) Check dial calibration. Refer to FM/MW/LW Tuner Alignment on page 9.
(14) Replace top cover.

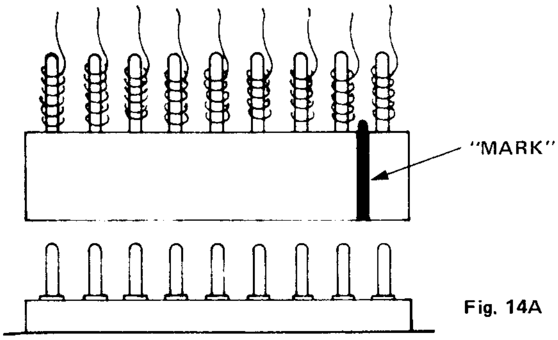
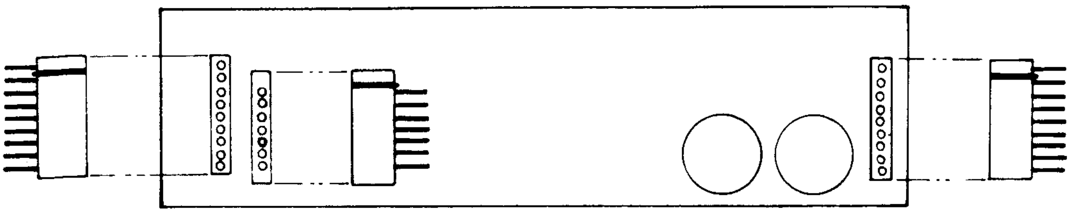


Fig. 14A

Precaution
Reconnect the female plug to proper position as indicated "MARK". Refer to Fig. 14B.

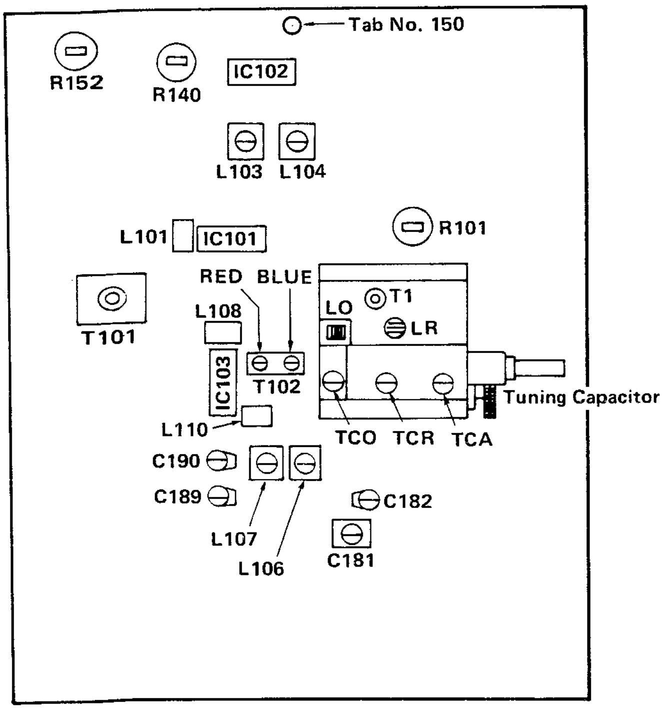


TAP-262A Power Amp. C.B. Ass'y

Fig. 14B

6. FM/MW/LW Tuner Alignment Procedures

Alignment locations for FM/MW/LW Tuner section


Tab No. 150
R152
R140
IC102
L103
L104
L101
IC101
R101
RED
BLUE
LO
T1
LR
T101
L108
IC103
T102
Tuning Capacitor
L110
TCO
TCR
TCA
C190
C189
C182
L107
L106
C181

TFC-16A FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y

Fig. 15

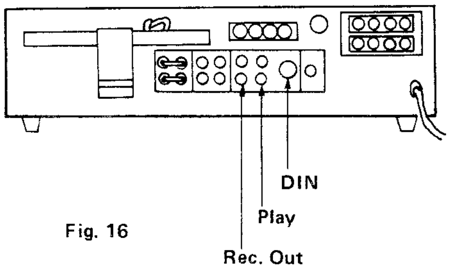

DIN
Play
Rec. Out

Fig. 16

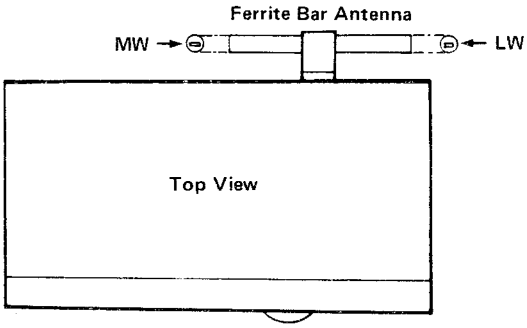

Ferrite Bar Antenna
MW
LW
Top View

Fig. 17

6-(1) FM Section

Discriminator, Center Meter, Distortion and Signal Gain

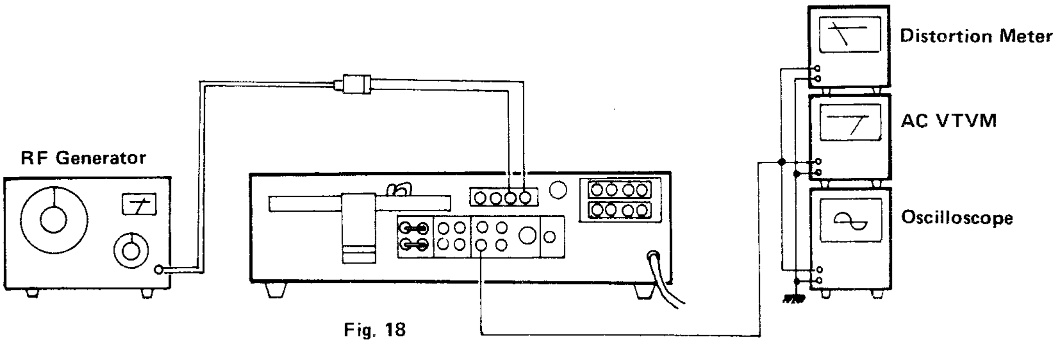

RF Generator
Distortion Meter
AC VTVM
Oscilloscope

Fig. 18

1. Connect an RF generator, 1kHz modulation and 75kHz deviation, to the antenna terminals on the rear panel through a dummy antenna. Refer to Fig. 16.
2. Connect an oscilloscope, distortion meter and VTVM to the Rec. Out Jacks on the rear panel. Refer to Fig. 16.
3. Tune to a frequency where there is no broadcasting.
4. Adjust the bottom core of T101 so that the center meter indicates "0" (zero). Refer to Fig. 15.
5. Set the RF generator to 98MHz.
6. Set the dial pointer to 98MHz.
7. Adjust the top core of T101 so that the distortion meter is minimized at a value less than 0.4%.
8. Set the output level of RF generator to 90μV and adjust R101 so that the signal meter deflects "2.5" (level number is shown on meter). If not deflect up to "2.5" after turning R101 clockwise fully, keep this position of R101 clockwise fully even deflecting a level number less than "2.5". Refer to Fig. 15.

Tracking and Sensitivity

Precaution: No adjustment is required. The tracking and sensitivity has been adjusted properly and completely at the factory. If any special reason occasioned, take the following procedures very carefully:

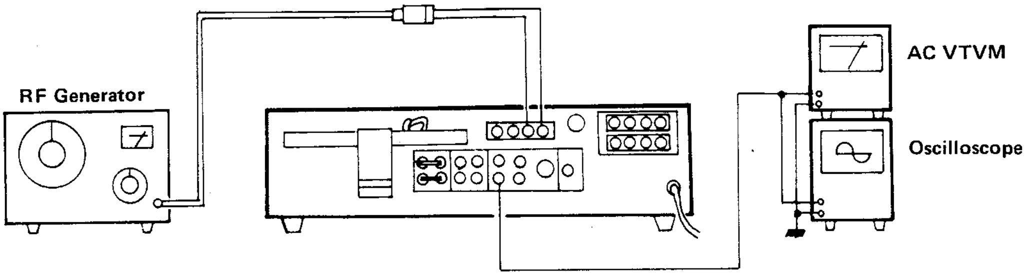


Fig. 19

Low Frequency

1. Connect an RF generator to the antenna terminals on the rear panel through a dummy antenna. Refer to Fig. 16.
2. Set the RF generator to 88MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 2μV.
3. Connect a VTVM and an oscilloscope to the Rec. Out Jacks on the rear panel. Refer to Fig. 16.
4. Set the dial pointer to 88MHz.
5. Adjust two coils LO and LR in the tuning gang to maximize the output. Refer to Fig. 15.

High Frequency

6. Set the RF generator to 108MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 2μV.
7. Set the dial pointer to 108MHz.
8. Adjust the FM trimmers TCO, TCR and TCA in the tuning gang to maximize the output.
9. Adjust the IF transformer T1 until maximum sensitivity is obtained.

Note: Repeat these high and low frequency adjustment alternately until maximum sensitivity is obtained.

Muting Level (Check Up)

Note: No adjustment is necessary. However, if the check up is required, take the following steps.

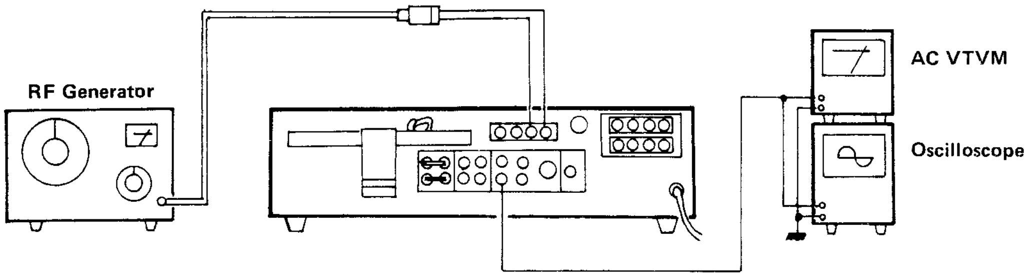


Fig. 20

1. Connect a VTVM and an oscilloscope to the Rec. Out Jacks.
2. Set the RF generator to 98MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 10μV (operation range must be 5 to 20μV) and check that the muting is operating.

Multiplex and Stereo Separation

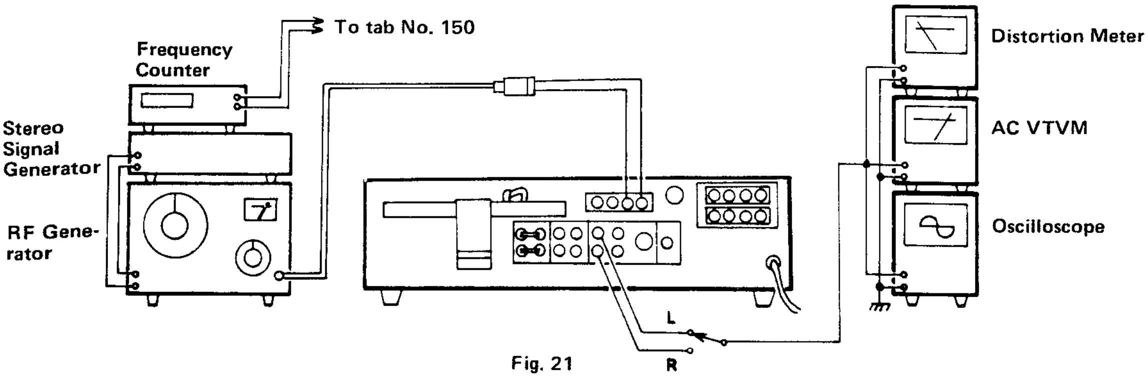


Fig. 21

Multiplex

1. Set the stereo signal generator as follows: Modulation frequency 1kHz, Deviation pilot 7.5kHz, Main and Sub. 67.5kHz. Connect its output of an RF generator.
2. Connect an RF generator to the antenna terminals through a dummy antenna.
3. Connect a VTVM, an oscilloscope and a distortion meter to the Rec. Out Jacks.
4. Set the RF generator to 98MHz and an output of 1mV.
5. Set the dial pointer to 98MHz.
6. Connect a frequency counter to Tab No. 150. Refer to Fig. 15.
7. Switch the pilot signal off (Stereo signal generator).
8. Adjust R140 so that the frequency counter indicates 19kHz (±0.01kHz).

Stereo Separation

9. Switch the selector of stereo signal generator to the left channel modulation.
10. Adjust R152 so that the output of the right channel is minimized.
11. Switch the selector of stereo signal generator to the right channel modulation.
12. Adjust R152 so that the output of the left channel is minimized.
13. Set R152 to average, if the separation of the right and left are different.

Note: Keep the muting pushbutton out during this procedure of stereo separation.

6-(2) MW Section

Tracking and Sensitivity

Precaution: Pull the bar antenna down fully before taking the following procedures listed below.

Low Frequency

1. Connect an RF generator to the AM antenna terminals on the rear panel, set this to 600kHz with 30% modulation at 400Hz.
2. Connect an AC VTVM and an oscilloscope to the Rec. Out Jacks on the rear panel. Refer to Fig. 16.
3. Set the dial pointer to 600kHz.
4. Adjust Osc. transformer L106 and Left ferrite bar (Right ferrite bar is for LW) to maximize the output signal. Refer to Fig. 17.

High Frequency

5. Set the RF generator to 1,400kHz with 30% modulation at 400Hz.
6. Set the dial pointer to 1,400kHz.
7. Adjust the trimmers C189 and C181 so that the output signal is maximized.
8. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

6-(3) LW Section

Tracking and Sensitivity

Precaution: Pull the bar antenna down fully before taking the following procedures listed below.

Low Frequency

1. Connect an RF generator to the AM antenna terminals on the rear panel, set this to 160kHz with 30% modulation at 400Hz.
2. Connect an AC VTVM and an oscilloscope to the Rec. Out Jacks on the rear panel. Refer to Fig. 16.
3. Set the dial pointer to 160kHz.
4. Adjust Osc. transformer L107 and Right ferrite bar (Left ferrite bar is for MW) to maximize the output signal. Refer to Fig. 17.

High Frequency

5. Set the RF generator to 350kHz with 30% modulation at 400Hz.
6. Set the dial pointer to 350kHz.
7. Adjust the trimmers C190 and C182 so that the output signal is maximized.
8. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

7. Power Amplifier Adjustment Procedures

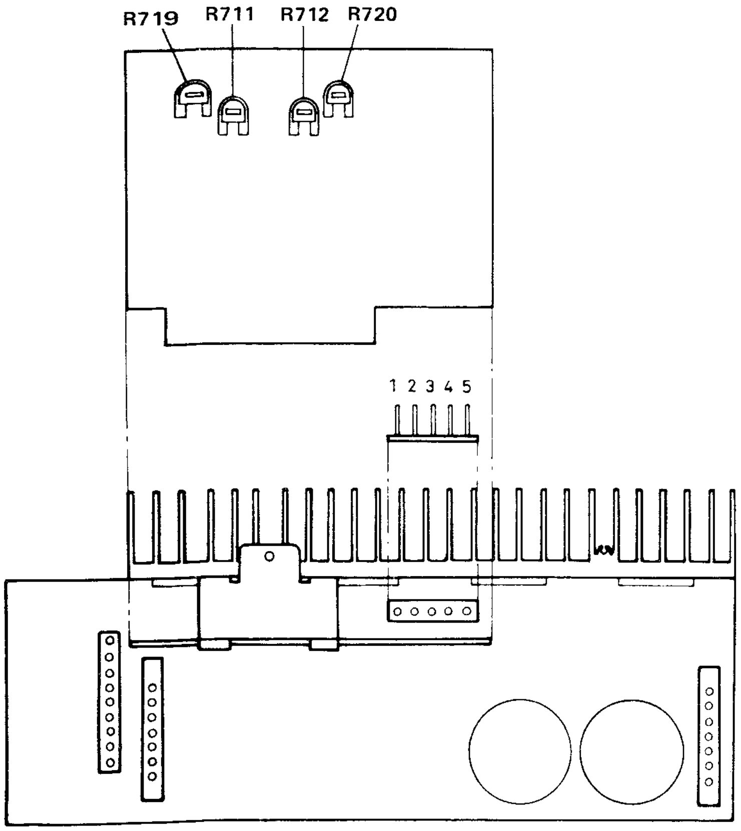

R719
R711
R712
R720
1 2 3 4 5

Fig. 22

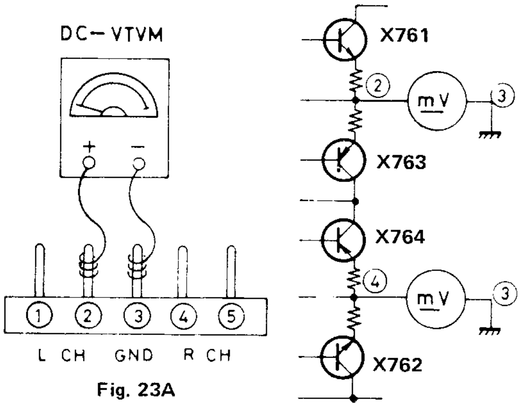

DC-VTVM
+
−
①
②
③
④
⑤
L CH
GND
R CH
X761
②
mV
(3)
X763
X764
(4)
mV
(3)
X762

Fig. 23A

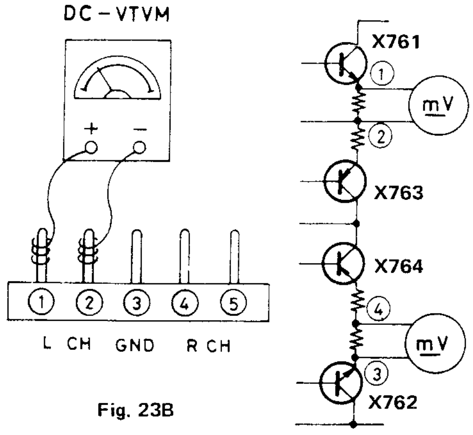

DC-VTVM
+
−
①
②
③
④
⑤
L CH
GND
R CH
X761
①
mV
②
X763
X764
(4)
mV
(3)
X762

Fig. 23B

(   ): For right channel adjustment

Precaution: Allow set to warm up at least 5 minutes before connecting DC VTVM.

7-(1) Center Voltage

1. Tune volume control to minimum.
2. Connect ground lead of DC VTVM to pin 3 (pin 3) and connect probe of DC VTVM to pin 2 (pin 4). Refer to Fig. 23A.
3. Adjust R711 (R712). Meter should read 0 (±0.05) volt. Refer to Fig. 22.

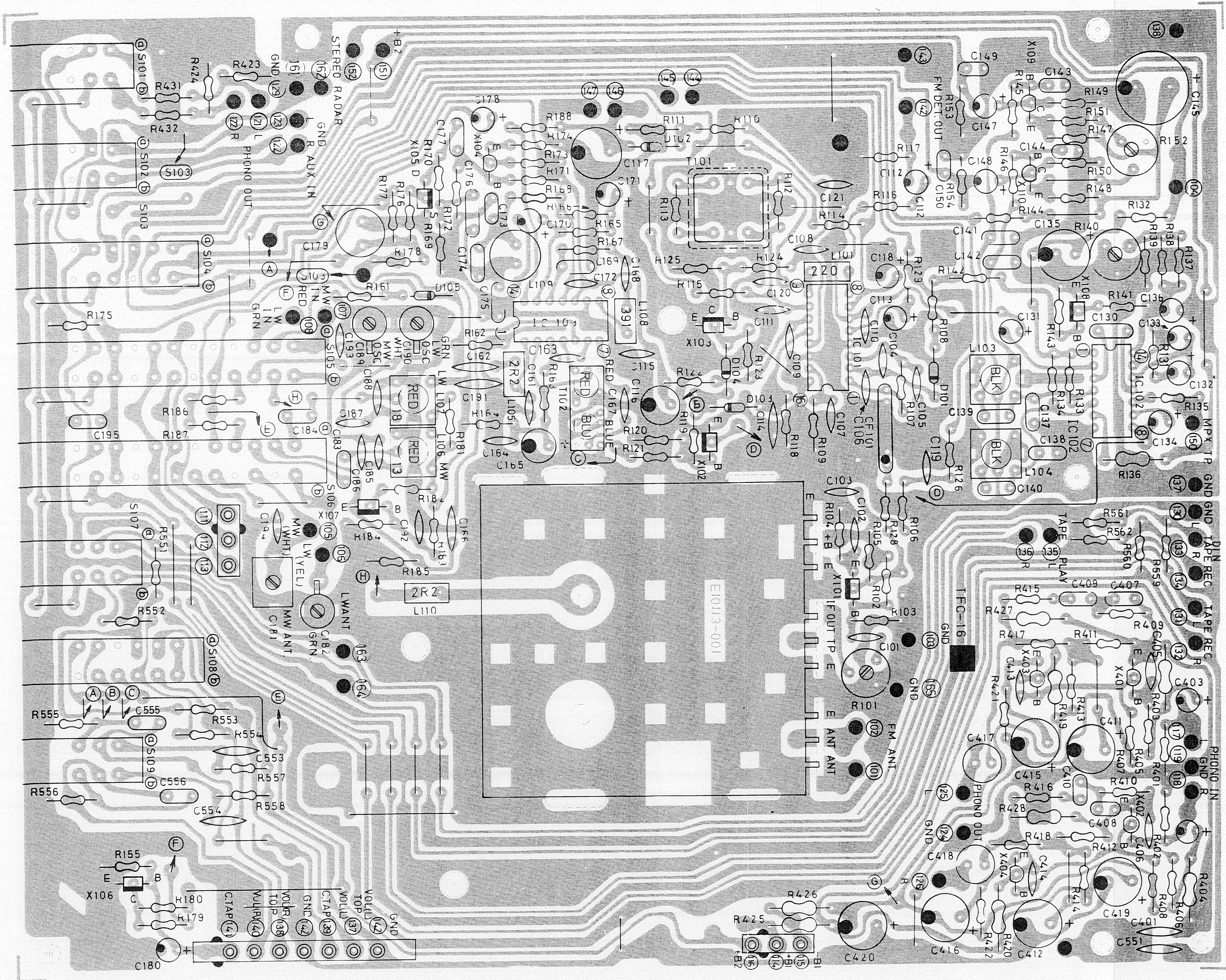
7-(2) Idling Current

4. Connect ground lead of DC VTVM to pin 2 (pin 4) and connect probe of DC VTVM to pin 1 (pin 5). Refer to Fig. 23B.
5. Adjust pot R719 (R720) for DC VTVM reading of 10mV. Refer to Fig. 22.

8. Circuit Board Ass'y Part Locations and Parts List

8-(1) TFC-16A FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y

(TFC-16B for U.K.)



S101
S102
S103
S104
S105
S106
S107
S108
S109
R423
R424
R431
R432
GND
PHONO OUT
AUX IN
STEREO RADAR
+B2
C178
R188
R174
R173
R171
R168
R166
R165
R167
C117
C171
R111
R110
D102
T101
R112
R113
C121
R114
C108
L101
220
R125
R124
R115
C120
C118
R123
FM DET OUT
R153
C149
C143
R145
X109
R149
R151
R147
C147
C145
R152
R117
C112
C150
R154
C148
R146
X110
C144
R150
R148
R116
R144
C135
R140
R132
R139
R138
R137
C141
C142
R142
X108
R141
C136
C131
R143
C130
C133
R131
IC102
C132
R135
MPX TP
C134
R136
L103
L104
BLK
C139
C137
C138
R134
R133
C140
GND
R561
R562
R560
R559
TAPE PLAY
TAPE REC
DIN
R415
C409
C407
R427
R417
R411
R409
C405
X403
X401
C403
C413
R421
R419
R413
R403
C411
R405
R407
R401
C417
C415
C410
R416
R410
PHONO IN
PHONO OUT
R428
C408
X402
R402
R418
R412
C406
C418
X404
C414
R414
R408
R404
R406
C419
C401
C551
C416
C420
C412
R422
R420
R426
R425
+B1
+B2
B1
TFC-16
R101
C101
FM ANT
ANT
R103
R102
X101
IF OUT TP
R104
R105
C102
C103
R128
R106
R126
C119
D101
R108
R107
C105
C104
C110
IC101
C113
CF101
C106
C107
R109
R118
C114
D103
D104
R122
R123
C109
X103
C111
C115
C116
X102
R119
R120
R121
L108
391
C168
C169
C172
L109
IC103
C163
R163
T102
RED
BLUE
C167
C161
2R2
L105
C162
R162
C191
R164
C164
C165
D105
R161
C175
C174
R178
C179
C173
C176
C170
X104
R170
X105
R172
R169
R176
R177
MW IN
LW IN
RED
GRN
C193
C189
C188
C190
MW OSC
LW OSC
WHT
L107
L106 MW
R181
R186
R187
C195
C187
C184
C183
C186
C185
R182
X107
C192
C194
R184
R183
C166
R185
MW (WHT)
LW (YEL)
L110
MW ANT.
C181
C182
LW ANT
GRN.
R175
R551
R552
E10113-001
R555
C555
R553
R554
C553
R557
C556
R558
C554
R556
R155
X106
R180
R179
C180
C.TAP
VOL(R)
TOP
GND
VOL(L)

Fig. 24

Transistors

Item No.	Part Number	Rating (Pc)	(f_T)	Description	Maker
X101	2SC535 (B)	100mW	700MHz	Silicon	Hitachi
X102	2SC458 (C)	200mW	230MHz	"	"
X103	2SC458 (C)	"	"	"	"
X104	2SC1775AV (F)	300mW	200MHz	"	"
X105	2SK40C	IDSS: 3mA, NF: 5dB (f=120Hz)		F.E.T.	"
X106	2SC458 (C)	200mW	230MHz	Silicon	"
X107	2SC461 (C)	"	"	"	"
X108	2SC458 (C)	"	"	"	"
X109	2SA872AV (E)	300mW	200MHz	"	"
X110	2SA872AV (E)	"	"	"	"
X401	2SA872AV (E)	"	"	"	"
X402	2SA872AV (E)	"	"	"	"
X403	2SC1775AV (F)	"	"	"	"
X404	2SC1775AV (F)	"	"	"	"

Integrated Circuits

Item No.	Part Number	Rating	Description	Maker
IC101	HA1137W	550mW	FM IF Det	Hitachi
IC102	HA1156W	400mW	MPX	"
IC103	HA1151	500mW	AM IF Det	"

Diodes

Item No.	Part Number	Rating	Description	Maker
D101	1S2473		Silicon	Toyo Dengu
D102	1S2473		"	"
D103	1S2473		"	"
D104	1S2473		"	"
D105	1S2473		"	"

Filter, Coils & Transformers

Item No.	Part Number	Rating	Description
CF101	E03609-001		Ceramic Filter
L101	E03522-220J	22μH	Choke
L103	E03407-005		MPX
L104	E03407-005		"
L105	E03522-2R2KY	2.2μH	Choke
L106	E03079-13		OSC
L107	E03079-18		"
L108	E03522-391KY	390μH	Choke
L109	E03566-333		Ferrite Inductor
L110	E03522-2R2KY	2.2μH	Choke
L111	E03695-001	2μH	Choke
T101	E03134-020		FM Detector Transformer
T102	E03613-002		AM I.F. Transformer

Capacitors

Item No.	Part Number	Rating		Description
C101	QCF11HP-223	0.022μF	50V	Ceramic
C102	QCZ0107-473	0.047μF	25V	″
C103	QCZ0107-473	″	″	″
C104	QCF11HP-223	0.022μF	50V	″
C105	QCZ0107-473	0.047μF	25V	″
C106	QCZ0107-473	″	″	″
C107	QCF11HP-223	0.022μF	50V	″
C108	QCF11HP-223	″	″	″
C109	QCZ0107-473	0.047μF	25V	″
C110	QCS11HJ-330	33pF	50V	″
C111	QCF11HP-223	0.022μF	″	″
C112	QEW41CA-106	10μF	16V	Electrolytic
C113	QEW41EA-475	4.7μF	25V	″
C114	QCF11HP-223	0.022μF	50V	Ceramic
C115	QCF11HP-223	″	″	″
C116	QEW41CA-476	47μF	16V	Electrolytic
C117	QEW40JA-227	220μF	6.3V	″
C118	QEW41HA-105	1μF	50V	″
C119	QEW41HA-105	″	″	″
C120	QCT05CH-150	15pF	″	Ceramic (Black)
C130	QFM41HK-473	0.047μF	″	Mylar
C131	QEB41EM-475	″	″	L.L.C. Electrolytic
C132	QEB41EM-106	10μF	25V	″
C133	QEB41HM-224	0.22μF	50V	″
C134	QEB41HM-105	1μF		″
C135	QEW41CA-227	220μF	16V	Electrolytic
C136	QFS42BJ-471	470pF	125V	Polystyrene
C137	QFM41HK-332	3300pF	50V	Mylar
C138	QFM41HK-332	″	″	″
C139	QFM41HK-182	1800pF	″	″
C140	QFM41HK-182	″	″	″
C141	QFM41HK-332	3300pF	″	″
C142	QFM41HK-332	″	″	″
C143	QFM41HK-222	2200pF	″	″
C144	QFM41HK-222	″	″	″
C145	QEW41CA-108	1000μF	16V	Electrolytic
C147	QEB41HM-224	0.22μF	50V	L.L.C. Electrolytic
C148	QEB41HM-224	″	″	″
C149	QFM41HK-152	1500pF	″	Mylar
C150	QFM41HK-152	″	″	″
C161	QCS11HJ-470	47pF	″	Ceramic
C162	QCZ0107-473	0.047μF	25V	″
C163	QCF11HP-223	0.022μF	50V	″
C164	QCF11HP-223	″	″	″
C165	QEW41CA-476	47μF	16V	Electrolytic
C166	QCZ0107-473	0.047μF	25V	Ceramic
C167	QCF11HP-223	0.022μF	50V	″
C168	QCS11HJ-331	330pF	″	″
C169	QFM41HK-102	1000pF	″	Mylar
C170	QEW41HA-105	1μF	″	Electrolytic
C171	QEW41CA-106	10μF	16V	″
C172	QCF11HP-223	0.022μF	50V	Ceramic
C173	QFM41HK-153	0.015μF	″	Mylar
C174	QFM41HK-183	0.018μF	″	″
C175	QFM41HK-333	0.033μF	″	″

Capacitors

Item No.	Part Number	Rating		Description
C176	QEB41HM-684	0.68μF	50V	L.L.C. Electrolytic
C177	QFM41HK-473	0.047μF	″	Mylar
C178	QEB41HM-224	0.22μF	″	L.L.C. Electrolytic
C179	QEZ0046-106	10μF	″	Electrolytic
C180	QEW41CA-106	″	″	″
C181	QAT2001-001			Trimmer
C182	QAT3001-006			″
C183	QFM41HK-103	0.01μF	50V	Mylar
C184	QFM41HK-223	0.022μF	″	″
C185	QCS11HJ-151	150pF	″	Ceramic
C186	QCS11HJ-181	180pF	″	″
C187	QCS11HJ-151	150pF	″	″
C188	QCS11HJ-270	27pF	″	″
C189	QAT3001-005			Trimmer
C190	QAT3001-006			″
C191	QCZ0107-473	0.047μF	25V	Ceramic
C192	QCZ0107-473	″	″	″
C193	QCS11HJ-5R0	5pF	50V	″
C195	QFM41HK-682	6800pF	″	Mylar
C401	QCF11HP-223	0.022μF	″	Ceramic
C403	QEB41EM-475	4.7μF	25V	L.L.C. Electrolytic
C404	QEB41EM-475	″	″	″
C405	QCS11HJ-391	390pF	50V	Ceramic
C406	QCS11HJ-391	″	″	″
C407	QFM41HJ-392	3900pF	″	Mylar
C408	QFM41HJ-392	″	″	″
C409	QFM41HJ-103	0.01μF	″	″
C410	QFM41HJ-103	″	″	″
C411	QEW40JA-477	470μF	6.3V	Electrolytic
C412	QEW40JA-477	″	″	″
C413	QCS11HJ-180	18pF	50V	Ceramic
C414	QCS11HJ-180	″	″	″
C415	QEW40JA-227	220μF	16V	Electrolytic
C416	QEW40JA-227	″	6.3V	″
C417	QEZ0046-475	4.7μF	50V	Non Pole Electrolytic
C418	QEZ0046-475	″	″	″
C419	QEW41EA-107	100μF	25V	Electrolytic
C420	QEW41EA-107	″	″	″
C551	QCF11HP-223	0.022μF	50V	Ceramic
C553	QCS11HJ-271	270pF	″	″
C554	QCS11HJ-271	″	″	″
C555	QFM41HK-273	0.027μF	″	Mylar
C556	QFM41HK-273	″	″	″

Resistors

Item No.	Part Number	Rating		Description
R101	QVP4A0B-471	470Ω		Variable
R102	QRD181J-123	12kΩ	1/8W	Carbon
R103	QRD181J-472	4.7kΩ	″	″
R104	QRD181J-102	1kΩ	″	″
R105	QRD181J-331	330Ω	″	″
R106	QRD181J-100	10Ω	″	″
R107	QRD181J-331	330Ω	″	″
R108	QRD181J-474	470kΩ	″	″
R109	QRD181J-104	100kΩ	″	″
R110	QRD181J-153	15kΩ	″	″
R112	QRD181J-562	5.6kΩ	″	″
R113	QRD181J-432	4.3kΩ	″	″
R114	QRD181J-271	270Ω	″	″
R115	QRD181J-752	7.5kΩ	″	″
R116	QRD181J-563	56kΩ	″	″
R117	QRD181J-223	22kΩ	″	″
R119	QRD181J-563	56kΩ	″	″
R120	QRD181J-103	10kΩ	″	″
R121	QRD181J-333	33kΩ	″	″
R122	QRD181J-100	10Ω	″	″
R123	QRD181J-123	12kΩ	″	″
R124	QRD181J-103	10kΩ	″	″
R125	QRD181J-273	27kΩ	″	″
R126	QRD181J-273	″	″	″
R128	QRD181J-271	270Ω	″	″
R129	QRD181J-123	12kΩ	″	″
R131	QRD181J-102	1kΩ	″	″
R132	QRD181J-560	56Ω	″	″
R133	QRD181J-392	3.9kΩ	″	″
R134	QRD181J-392	″	″	″
R135	QRD181J-105	1MΩ	″	″
R136	QRD126J-181	180Ω	1/2W	Uninflammable Carbon
R137	QRD181J-183	18kΩ	1/8W	Carbon
R138	QRD181J-474	470kΩ	″	″
R139	QRD181J-153	15kΩ	″	″
R140	QVP4A0B-472	4.7kΩ		Variable
R141	QRD181J-392	3.9kΩ	1/8W	Carbon
R142	QRD181J-563	56kΩ	″	″
R143	QRD181J-104	100kΩ	″	″
R144	QRD181J-681	680Ω	″	″
R145	QRD181J-183	18kΩ	″	″
R146	QRD181J-183	″	″	″
R147	QRD181J-102	1kΩ	″	″
R148	QRD181J-821	″	″	″
R149	QRD181J-392	3.9kΩ	″	″
R150	QRD181J-392	″	″	″
R151	QRD181J-682	6.8kΩ	″	″
R152	QVP4A0B-473	47kΩ		Variable
R153	QRD181J-473	″	1/8W	Carbon
R154	QRD181J-473	″	″	″
R155	QRD181J-474	470kΩ	″	″
R161	QRD181J-101	100Ω	″	″
R162	QRD181J-153	15kΩ	″	″
R163	QRD181J-472	4.7kΩ	″	″
R164	QRD181J-151	150Ω	″	″
R165	QRD181J-103	10kΩ	″	″

Resistors

Item No.	Part Number	Rating		Description
R166	QRD181J-103	10kΩ	1/8W	Carbon
R167	QRD181J-331	330Ω	″	″
R168	QRD181J-222	2.2kΩ	″	″
R169	QRD181J-103	10kΩ	″	″
R170	QRD181J-473	47kΩ	″	″
R171	QRD181J-394	390kΩ	″	″
R172	QRD181J-683	68kΩ	″	″
R173	QRD181J-332	3.3kΩ	″	″
R174	QRD181J-102	1kΩ	″	″
R175	QRD181J-104	100kΩ	″	″
R176	QRD181J-334	330kΩ	″	″
R177	QRD181J-334	″	″	″
R178	QRD181J-561	560Ω	″	″
R179	QRD181J-683	68kΩ	″	″
R180	QRD181J-683	″	″	″
R181	QRD181J-821	820Ω	″	″
R182	QRD181J-122	1.2kΩ	″	″
R183	QRD181J-333	33kΩ	″	″
R184	QRD181J-183	18kΩ	″	″
R185	QRD181J-102	1kΩ	″	″
R186	QRD181J-151	150Ω	″	″
R187	QRD181J-151	″	″	″
R188	QRD181J-152	1.5kΩ	″	″
R401	QRD181J-683	68kΩ	″	″
R402	QRD181J-683	″	″	″
R403	QRD141J-184	180kΩ	1/4W	″
R404	QRD141J-184	″	″	″
R405	QRD181J-182	1.8kΩ	1/8W	″
R406	QRD181J-182	″	″	″
R407	QRD181J-104	100kΩ	″	″
R408	QRD181J-104	″	″	″
R409	QRD181J-223	22kΩ	″	″
R410	QRD181J-223	″	″	″
R411	QRD181J-391	390Ω	″	″
R412	QRD181J-391	″	″	″
R413	QRD181J-474	470kΩ	″	″
R414	QRD181J-474	″	″	″
R415	QRD181J-391	390Ω	″	″
R416	QRD181J-391	″	″	″
R417	QRD181J-334	330kΩ	″	″
R418	QRD181J-334	″	″	″
R419	QRD126J-472	4.7kΩ	1/2W	Uninflammable Carbon
R420	QRD126J-472	″	″	″
R421	QRD181J-102	1kΩ	1/8W	Carbon
R422	QRD181J-102	″	″	″
R423	QRD181J-184	180kΩ	″	″
R424	QRD181J-184	″	″	″
R425	QRD126J-101	100Ω	1/2W	Uninflammable Carbon
R426	QRD126J-101	″	″	″
R427	QRD141J-334	330kΩ	1/4W	Carbon
R428	QRD141J-334	″	″	″
R431	QRD181J-471	470Ω	1/8W	″
R432	QRD181J-471	″	″	″
R551	QRD181J-472	4.7kΩ	″	″
R552	QRD181J-472	″	″	″
R553	QRD181J-472	″	″	″

Resistors

Item No.	Part Number	Rating		Description
R554	QRD181J-472	4.7kΩ	1/8W	Carbon
R555	QRD181J-153	15kΩ	"	"
R556	QRD181J-153	"	"	"
R557	QRD181J-564	560kΩ	"	"
R558	QRD181J-564	"	"	"
R559	QRD181J-334	330kΩ	"	"
R560	QRD181J-334	"	"	"
R561	QRD181J-104	100kΩ	"	"
R562	QRD181J-104	"	"	"

Switch

Item No.	Part Number	Rating	Description
	QSP0019-001		Push Switch

Others

Item No.	Part Number	Part Number for U.K.	Description
	*E03546-010	E03546-011	Front End
	E03606-001		Male Contact Plug
	E49829-003		Shield Case

*For U.K., refer to page 36.

8-(2) TRF-33A Antenna C.B. Ass'y

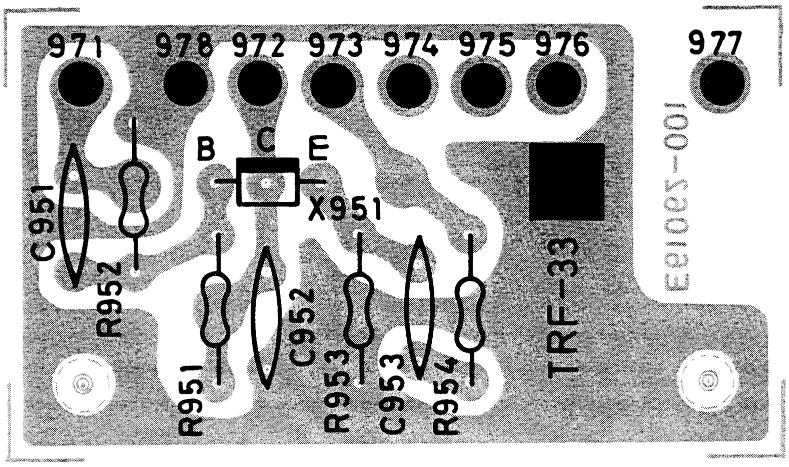

971
978
972
973
974
975
976
977
B
C
E
X951
C951
R952
R951
C952
R953
C953
R954
TRF-33

Fig. 25

Transistor

Item No.	Part Number	Rating (Pc)	(fT)	Description	Maker
X951	2SC461 (B)	200mW	230MHz	Silicon	Hitachi

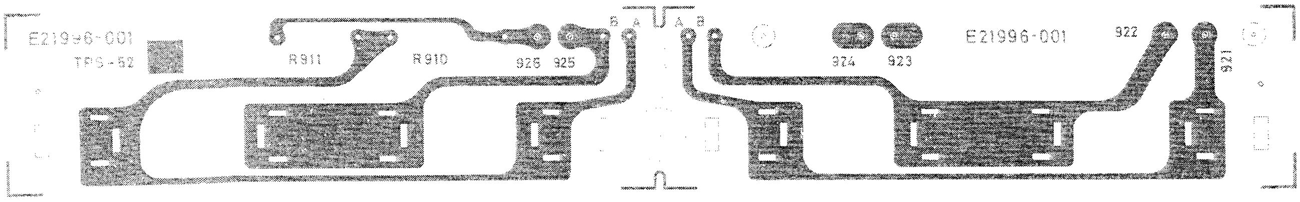
Capacitors

Item No.	Part Number	Rating		Description
C951	QCZ0107-473	0.047μF	25V	Ceramic
C952	QCZ0107-473	"	"	"
C953	QCZ0107-473	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R951	QRD181J-104	100kΩ	1/8W	Carbon
R952	QRD181J-153	15kΩ	"	"
R953	QRD181J-222	2.2kΩ	"	"
R954	QRD181J-821	820Ω	"	"

8-(3) TPS-52 Lamp C.B. Ass'y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TPS-52
R911
R910
926
925
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A
A
B
924
923
E21996-001
922
921

Fig. 26

Resistors

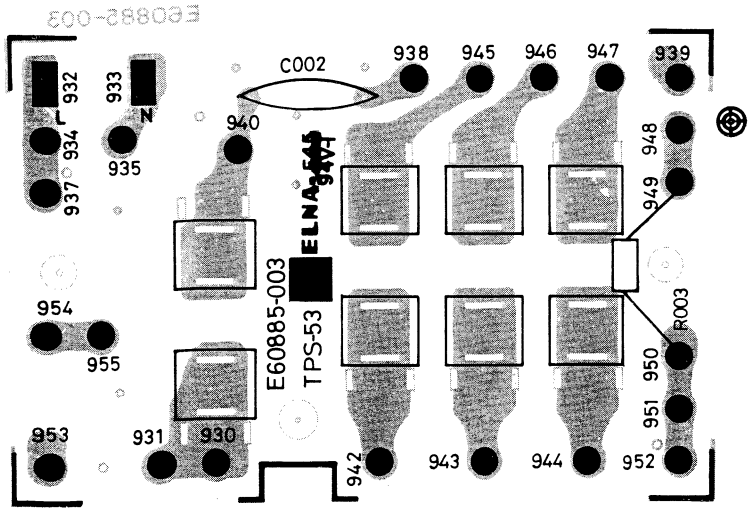
Item No.	Part Number	Rating		Description
R910	QRG016J-680	68Ω	1W	O.M.F.
R911	QRD126J-681	680Ω	1/2W	Uninflammable Carbon

Other

Item No.	Part Number	Rating	Description
	E45524-001		Contact Clip

8-(4) TPS-53M AC Fuse C.B. Ass'y

(TPS-53NBS for U.K.)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937
940
948
949
ELNA 545
94V-1
E60885-003
TPS-53
R003
954
955
950
951
953
931
930
942
943
944
952

*For U.K., refer to page 36.

Fig. 27

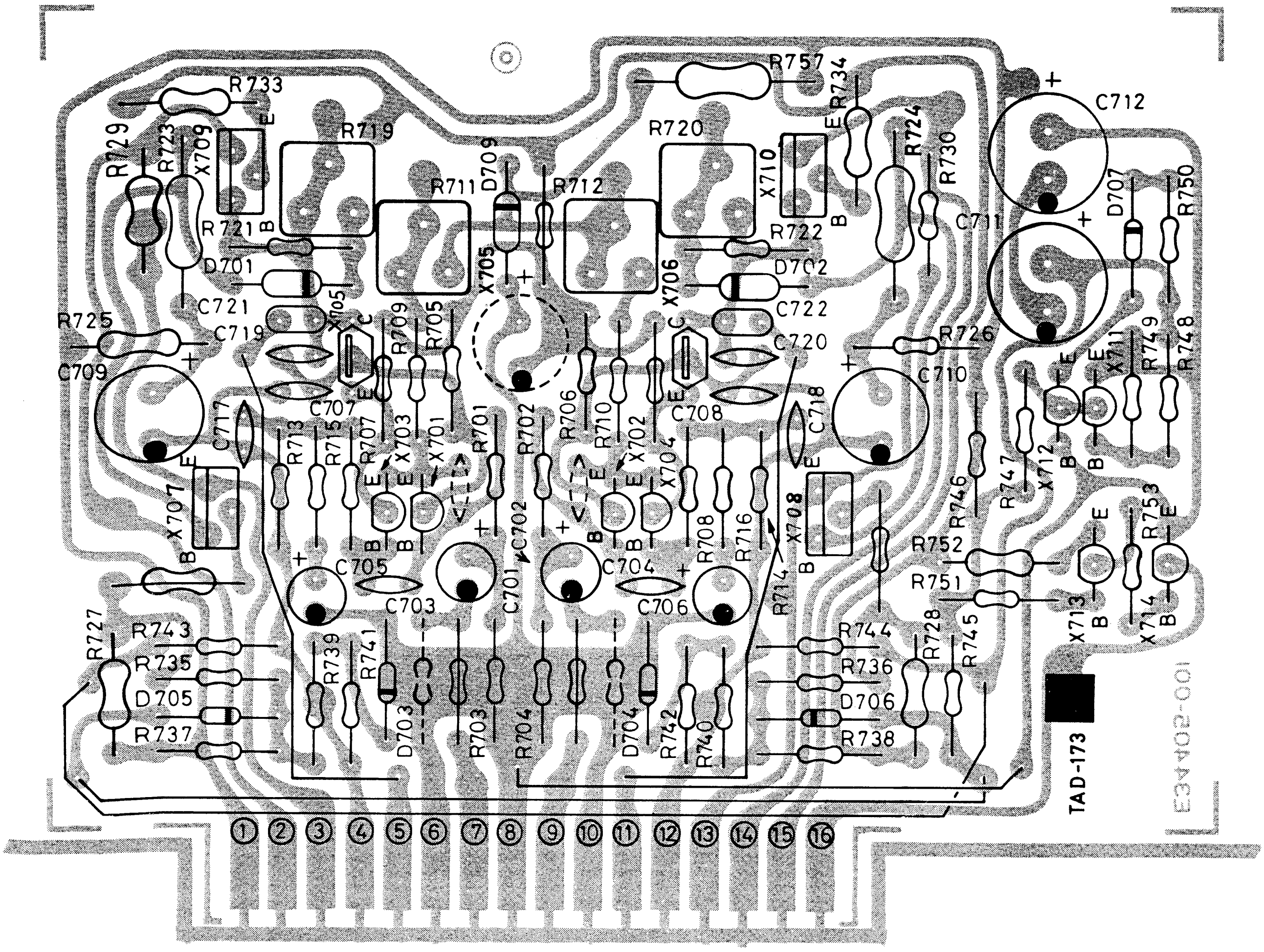
Capacitors

Item No.	Part Number	Part Number for U.K.	Rating		Description
*C002	QCZ9008-101	QCZ9008-101BS	100pF	4kV	Ceramic

Fuses

Item No.	Part Number	Part Number for U.K.	Rating	Description
	*QMF51A2-1R0	QMF51A2-1R0BS	1AT	Fuse (To be ordered separately)
	*QMF51A2-2R5	QMF51A2-2R5BS	2.5AT	"
	*QMF51A2-6R3	QMF51A2-6R3BS	6.3AT	"
	E48965-002			Fuse Clip

8-(5) TAD-173B Driver Amp. C.B. Ass'y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D709
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R720
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X710
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D707
R750
C711
R721
D701
R722
D702
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R702
R706
R710
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C702
C704
C706
R708
R716
R714
X713
X714
R727
R743
R735
D705
R737
R739
R741
D703
R703
R704
D704
R742
R740
R744
R736
D706
R738
R728
R745
TAD-173
E34402-001
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯

Fig. 28

Transistors

Item No.	Part Number	Rating			Description	Maker
		VCEO	Pc	fT		
X701	2SA872AV(E)	120V	300mW	200MHz	Silicon Transistor	Hitachi
X702	″	″	″	″	″	″
X703	″	″	″	″	″	″
X704	″	″	″	″	″	″
X705	2SC1628(Y)	150V	1W	40MHz	″	Toshiba
X706	″	″	″	″	″	″
X707	2SC1904 (V)	″	″	130MHz	″	Fujitsu
X708	″	″	″	″	″	″
X709	2SA899 (V)	″	″	100MHz	″	″
X710	″	″	″	″	″	″
X711	2SC1775AV(F)	″	300mW	200MHz	″	Hitachi
X712	″	″	″	″	″	″
X713	2SA872AV(E)	″	″	″	″	″
X714	2SC1775AV(F)	″	″	″	″	″

Diodes

Item No.	Part Number	Rating	Description	Maker
D701	SV03		Silicon Varistor	Sanken
D702	″		″	″
D703	1S2473		Silicon Diode	Toyo Dengu
D704	″		″	″
D705	″		″	″
D706	″		″	″
D707	″		″	″
D709	E0771-10		Zener Diode WZ-090 9V	Fuji

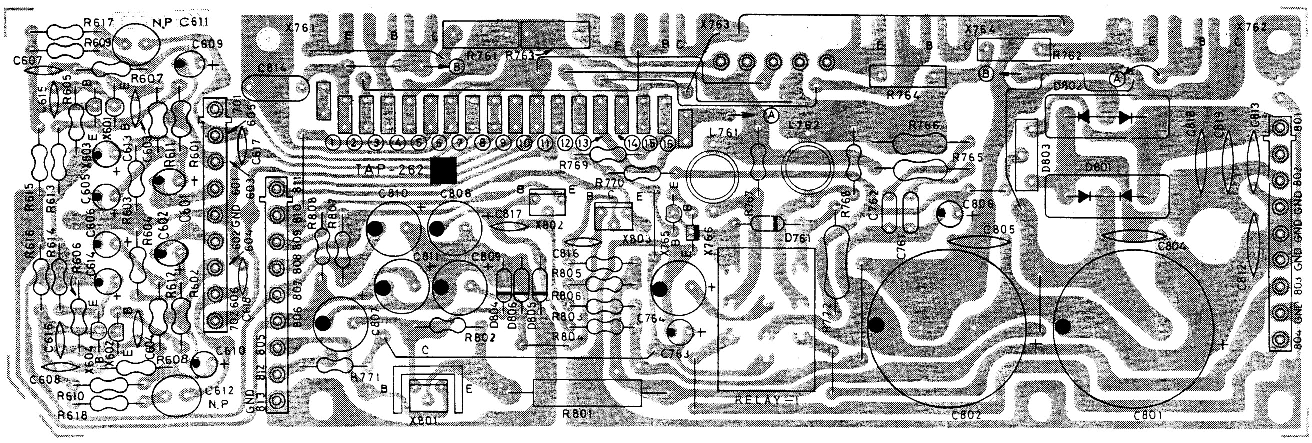
Capacitors

Item No.	Part Number	Rating		Description
C701	QEW41HA-474	0.47μF	50V	Electrolytic
C702	″	″	″	″
C703	QCS11HJ-391	390pF	″	Ceramic
C704	″	″	″	″
C705	QEW41AA-106	10μF	16V	Electrolytic
C706	″	″	″	″
C707	QCS12HJ-100	10pF	500V	Ceramic
C708	″	″	″	″
C709	QEW41HA-476	47μF	50V	Electrolytic
C710	″	″	″	″
C711	QEW41AA-477	470μF	10V	″
C712	″	″	″	″
C717	QSC11HJ-220	22pF	50V	Ceramic
C718	″	″	″	″
C719	QCS12HJ-100	10pF	500V	″
C720	″	″	″	″
C721	QFM41HK-333	0.033μF	50V	Mylar
C722	″	″	″	″

Resistors

Item No.	Part Number	Rating		Description
R701	QRD141J-152	1.5kΩ	1/4W	Carbon
R702	"	"	"	"
R703	QRD141J-563	56kΩ	"	"
R704	"	"	"	"
R705	QRD141J-182	1.8kΩ	"	"
R706	"	"	"	"
R707	QRD141J-152	1.5kΩ	"	"
R708	"	"	"	"
R709	QRD141J-822	8.2kΩ	"	"
R710	"	"	"	"
R711	QVP9AOB-472	4.7kΩ		Variable
R712	"	"		"
R713	QRD141J-563	56kΩ	1/4W	Carbon
R714	"	"	"	"
R715	QRD141J-332	3.3kΩ	"	"
R716	"	"	"	"
R719	QVP9AOB-221	220Ω		Variable
R720	"	"		"
R721	QRD141J-121	120Ω	1/4W	Carbon
R722	"	"	"	"
R723	QRG017J-152	1.5kΩ	1W	O.M.F.
R724	"	"	"	"
R725	QRG129J-272	2.7kΩ	1/2W	Uninflammable O.M.F.
R726	"	"	"	"
R727	QRG129J-100	10Ω	"	"
R728	"	"	"	"
R729	QRX129J-221	220Ω	"	"
R730	"	"	"	"
R733	QRG129J-100	10Ω	"	"
R734	"	"	"	"
R735	QRD141J-272	2.7kΩ	1/4W	Carbon
R736	"	"	"	"
R737	QRD141J-682	6.8kΩ	"	"
R738	"	"	"	"
R739	QRD141J-473	47kΩ	"	"
R740	"	"	"	"
R741	QRD141J-472	4.7kΩ	"	"
R472	"	"	"	"
R473	QRD141J-103	10kΩ	"	"
R474	"	"	"	"
R475	QRD141J-562	5.6kΩ	"	"
R746	QRD141J-332	3.3kΩ	"	"
R747	QRD141J-153	15kΩ	"	"
R748	QRD141J-152	1.5kΩ	"	"
R749	QRD141J-392	3.9kΩ	"	"
R750	QRD141J-102	1kΩ	"	"
R751	QRD141J-471	470Ω	"	"
R752	QRG129J-471	"	1/2W	Uninflammable O.M.F.
R753	QRD141J-473	47kΩ	1/4W	Carbon
R757	QRG016J-392	3.9kΩ	1W	Uninflammable O.M.F.

8-(6) TAP-262A Power Amp. C.B. Ass'y



R617
N.P C611
R609
C609
C607
R607
X761
X763
X764
X762
R761
R763
R762
R764
R766
R765
C814
TAP-262
L761
L762
C810
C808
C617
X802
X803
R769
R770
R767
R768
D761
C762
C806
C805
C804
D803
D801
D802
C818
C819
C813
C812
C611
C809
C816
R805
R806
R803
R804
R802
C807
D804
D806
D805
C764
C763
X765
X766
R771
X801
R801
RELAY-1
C802
C801
R808
R809
X601
X602
X603
X604
R601
R602
R603
R604
R605
R606
R608
R610
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R618
C601
C602
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C613
C614
C615
C616
C617
GND
801
802
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812
813

Fig. 29

Transistors

Item No.	Part Number	Rating (Pc)	(fT)	Description	Maker
X601	2SA872AV (E)	300mW	200MHz	Silicon	Hitachi
X602	2SA872AV (E)	"	"	"	"
X603	2SC1775AV (F)	"	"	"	"
X604	2SC1775AV (E)	"	"	"	"
X761	2SC1030 (B, C)	50W	10MHz	"	"
X762	2SC1030 (B, C)	"	"	"	"
X763	2SA757 (B, C)	60W	24MHz	"	"
X764	2SA757 (B, C)	"	"	"	"
X765	2SC1775AV (F)	300mW	200MHz	"	"
X766	2SC1213A (C) S	400mW	150MHz	"	"
X801	2SD313V (D, E)	30W	8MHz	"	Sanyo
X802	2SB514V (D, E)	20W	"	"	"
X803	2SB514V (D, E)	"	"	"	"

Diodes

Item No.	Part Number	Rating	Description	Maker
D761	1S2473		Silicon	Toyo Dengu
D801	ESAC04-02C		"	Kyodo Denki
D802	ESAC04-02N		"	"
D803	ESAB02-02C		"	"
D804	WZ-130		Zener	JRC
D805	WZ-240		"	"
D806	WZ-240		"	"

Coils

Item No.	Part Number	Rating	Description
L761	E04059-2R7	2.7μH	Choke
L762	E04059-2R7	"	"

Capacitors

Item No.	Part Number	Rating		Description
C601	QEB41EM-225	2.2μF	25V	L.L.C. Electrolytic
C602	QEB41EM-225	"	"	"
C603	QCS11HJ-391	390pF	50V	Ceramic
C604	QCS11HJ-391	"	"	"
C605	QEW41AA-476	47μF	10V	Electrolytic
C606	QEW41AA-476	"	"	"
C607	QCS11HJ-180	18pF	50V	Ceramic
C608	QCS11HJ-180	"	"	"
C609	QEW41AA-476	47μF	10V	Electrolytic
C610	QEW41AA-476	"	"	"
C611	QEZ0046-475	4.7μF	50V	Non Pole Electrolytic
C612	QEZ0046-475	"	"	"
C613	QEW41AA-476	47μF	10V	Electrolytic
C614	QEW41AA-476	"	"	"
C615	QCS11HJ-3R0	3pF	50V	Ceramic
C616	QCS11HJ-3R0	"	"	"
C617	QCS11HJ-151	150pF	"	"
C618	QCS11HJ-151	"	"	"
C761	QFM41HK-473	0.047μF	"	Mylar
C762	QFM41HK-473	"	"	"
C763	QEW41CA-106	10μF	16V	Electrolytic
C764	QEW40JA-227	220μF	6.3V	"
C801	QEW71GH-688	6800μF	42V	"
C802	QEW71GH-688	"	"	"
C804	QCF12HP-103	0.01μF	50V	Ceramic
C805	QCF12HP-103	"	"	"
C806	QEW41HA-106	10μF	"	Electrolytic
C807	QEW41CA-477	470μF	16V	"
C808	QEW41VA-107	100μF	35V	"
C809	QEW41VA-107	"	"	"
C810	QEW41EA-107	"	25V	"
C811	QEW41EA-107	"	"	"
C812	QCF12HP-103	0.01μF	50V	Ceramic
C813	QCF12HP-103	"	"	"
C816	QCF11HP-103	0.01μF	"	Ceramic
C817	QCF11HP-103	"	"	"
C818	QCF12HP-103	"	"	"
C819	QCF12HP-103	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R601	QRD141J-102	1kΩ	1/4W	Carbon
R602	QRD141J-102	″	″	″
R603	QRD141J-184	180kΩ	″	″
R604	QRD141J-184	″	″	″
R605	QRD141J-154	150kΩ	″	″
R606	QRD141J-154	″	″	″
R607	QRD141J-682	6.8kΩ	″	″
R608	QRD141J-682	″	″	″
R609	QRD141J-103	10kΩ	″	″
R610	QRD141J-103	″	″	″
R611	QRD141J-222	2.2kΩ	″	″
R612	QRD141J-222	″	″	″
R613	QRD141J-182	1.8kΩ	″	″
R614	QRD141J-182	″	″	″
R615	QRD141J-562	5.6kΩ	″	″
R616	QRD141J-562	″	″	″
R617	QRD141J-562	″	″	″
R618	QRD141J-562	″	″	″
R761	QRM054K-R47	0.47Ω	5W	Metalized Plate
R762	QRM054K-R47	″	″	″
R763	QRM054K-R47	″	″	″
R764	QRM054K-R47	″	″	″
R765	QRX017J-100	10Ω	1W	Uninflammable M.F.
R766	QRX017J-100	″	″	″
R767	QRD126J-4R7	4.7Ω	1/2W	Uninflammable
R768	QRD126J-4R7	″	″	″
R769	QRD141J-560	56Ω	1/4W	Carbon
R770	QRD141J-224	220kΩ	″	″
R771	QRD141J-104	100kΩ	″	″
R772	QRG026J-331	330Ω	2W	Oxide Metal Film
R801	QRF051K-101	100Ω	5W	Cement
R802	QRD141J-272	2.7kΩ	1/4W	Carbon
R803	QRG129J-101	100Ω	1/2W	Uninflammable O.M.
R804	QRD141J-222	2.2kΩ	1/4W	Carbon
R805	QRG129J-101	100Ω	1/2W	Uninflammable O.M.
R806	QRD141J-222	2.2kΩ	1/4W	Carbon
R807	QRG129J-680	68Ω	1/2W	Uninflammable O.M.
R808	QRG129J-220	22Ω	″	″

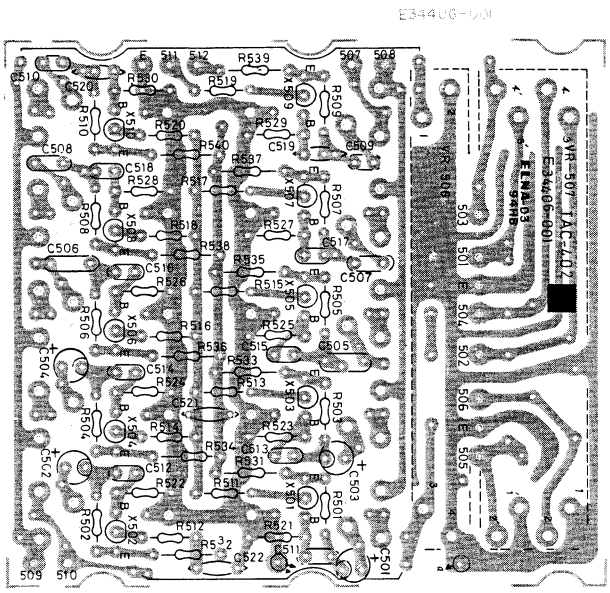
Switch

Item No.	Part Number	Rating	Description
	ESK1D24-311		Relay

Others

Item No.	Part Number	Rating	Description
	E03606-001		Male Contact Plug
	E03677-002		Transistor Socket
	E22008-002		Heat Sink
	E34453-001		Heat Sink Holder
	E34453-002		″
	E49784-002		Connect Pin
	E60171-001		Heat Sink (For 2SD313V)

8-(7) TAC-402C S.E.A.(Sound Effect Amp.) C.B. A.ss'y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X509
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R532
C522
C511
C501
509
510
VR-506
VR-507
TAC-402
ELNA
503
501
504
502
506
505

Fig. 30

Transistors

Item No.	Part Number	Rating (Pc)	(fT)	Description	Maker
X501	2SC1775AV (F)	300mW	200MHz	Silicon	Hitachi
X502	2SC1775AV (F)	"	"	"	"
X503	2SC1775AV (F)	"	"	"	"
X504	2SC1775AV (F)	"	"	"	"
X505	2SC1775AV (F)	"	"	"	"
X506	2SC1775AV (F)	"	"	"	"
X507	2SC1775AV (F)	"	"	"	"
X508	2SC1775AV (F)	"	"	"	"
X509	2SC1775AV (F)	"	"	"	"
X510	2SC1775AV (F)	"	"	"	"

Capacitors

Item No.	Part Number	Rating		Description
C501	QEB41EM-475	4.7μF	25V	L.L.C. Electrolytic
C502	QEB41EM-475	"	"	"
C503	QEB41HM-474	0.47μF	50V	"
C504	QEB41HM-474	"	"	"
C505	QFM41HK-124	0.14μF	"	Mylar
C506	QFM41HK-124	"	"	"
C507	QFM41HK-273	0.027μF	"	"
C508	QFM41HK-273	"	"	"
C509	QFM41HK-562	5600pF	"	"
C510	QFM41HK-562	"	"	"
C511	QFM41HK-223	0.022μF	"	"
C512	QFM41HK-223	"	"	"
C513	QFM41HK-822	8200pF	"	"
C514	QFM41HK-822	"	"	"
C515	QFM41HK-332	3300pF	"	"
C516	QFM41HK-332	"	"	"
C517	QFM41HK-102	1000pF	"	"
C518	QFM41HK-102	"	"	"
C519	QCS11HJ-681	680pF	"	Ceramic
C520	QCS11HJ-681	"	"	"
C521	QCF11HP-473	0.047μF	"	"
C522	QCF11HP-473	"	"	"

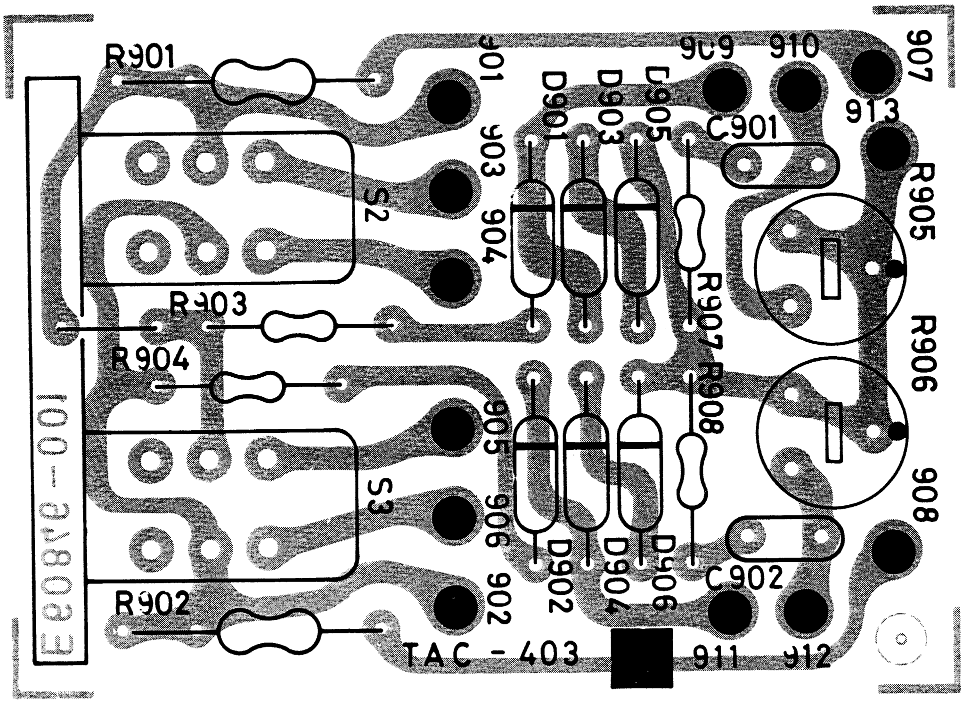
Resistors

Item No.	Part Number	Rating		Description
R501	QRD181J-122	1.2kΩ	1/8W	Carbon
R502	QRD181J-122	″	″	″
R503	QRD181J-122	″	″	″
R504	QRD181J-122	″	″	″
R505	QRD181J-122	″	″	″
R506	QRD181J-122	″	″	″
R507	QRD181J-122	″	″	″
R508	QRD181J-122	″	″	″
R509	QRD181J-122	″	″	″
R510	QRD181J-122	″	″	″
R511	QRD181J-391	390Ω	″	″
R512	QRD181J-391	″	″	″
R513	QRD181J-391	″	″	″
R514	QRD181J-391	″	″	″
R515	QRD181J-391	″	″	″
R516	QRD181J-391	″	″	″
R517	QRD181J-391	″	″	″
R518	QRD181J-391	″	″	″
R519	QRD181J-391	″	″	″
R520	QRD181J-391	″	″	″
R521	QRD181J-134	130kΩ	″	Carbon
R522	QRD181J-134	″	″	″
R523	QRD181J-913	91kΩ	″	″
R524	QRD181J-913	″	″	″
R525	QRD181J-513	51kΩ	″	″
R526	QRD181J-513	″	″	″
R527	QRD181J-333	33kΩ	″	″
R528	QRD181J-333	″	″	″
R529	QRD181J-243	24kΩ	″	″
R530	QRD181J-243	″	″	″
R531	QRD141J-682	6.8kΩ	1/4W	″
R532	QRD141J-682	″	″	″
R533	QRD141J-682	″	″	″
R534	QRD141J-682	″	″	″
R535	QRD141J-682	″	″	″
R536	QRD141J-682	″	″	″
R537	QRD141J-682	″	″	″
R538	QRD141J-682	″	″	″
R539	QRD141J-682	″	″	″
R540	QRD141J-682	″	″	″
VR501	QVZ5010-002			Slide Volume
VR502	QVZ5010-002			″
VR503	QVZ5010-002			″
VR504	QVZ5010-002			″
VR505	QVZ5010-002			″
VR506	QVT6C2W-6F5			″
VR507	QVT9C2B-5G5E			″

Others

Item No.	Part Number	Rating	Description
	E34421-001		S.E.A. Bracket
	E60865-001		Felt Spacer
	E03565-7B0		7 Pins Socket
	E03565-9B0		9 Pins Socket

8-(8) TAC-403C Speaker Switch C.B. Ass'y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R903
R904
R902
S2
S3
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905
906
902
D901
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D904
D906
R907
R908
C901
C902
909
910
907
913
R905
R906
908
911
912
TAC-403

Fig. 31

Resistors

Item No.	Part Number	Rating		Description
R901 R902	QRD126J-221 QRD126J-221	220Ω 〃	1W 〃	Uninflammable Carbon 〃

Switchs

Item No.	Part Number	Rating	Description
S2 & S3	QSP0229-004		Push Switch

Others

Item No.	Part Number	Rating	Description
	E03565-9B0 QMS6301-001		9 Pins Socket Jack Ass'y

9. Packing Materials List

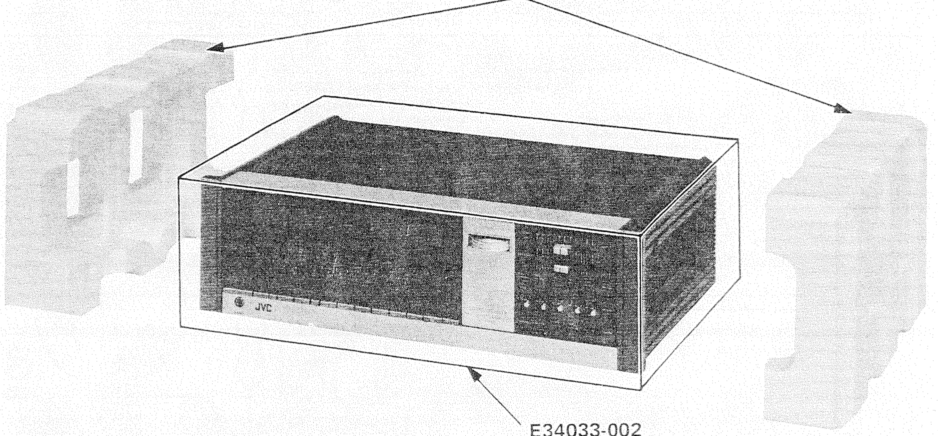

JR-S200L-NZ
Left & Right Fillers
E34033-002
Envelope

Fig. 32

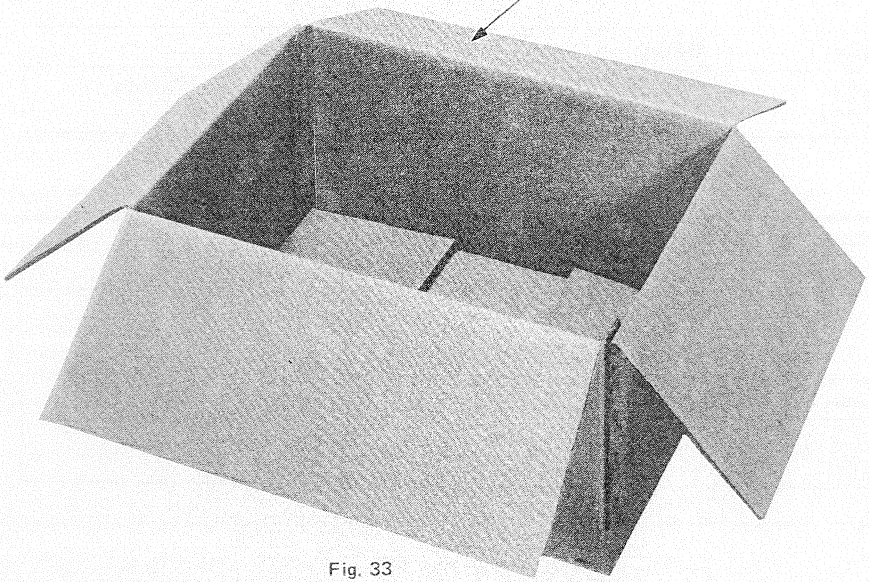
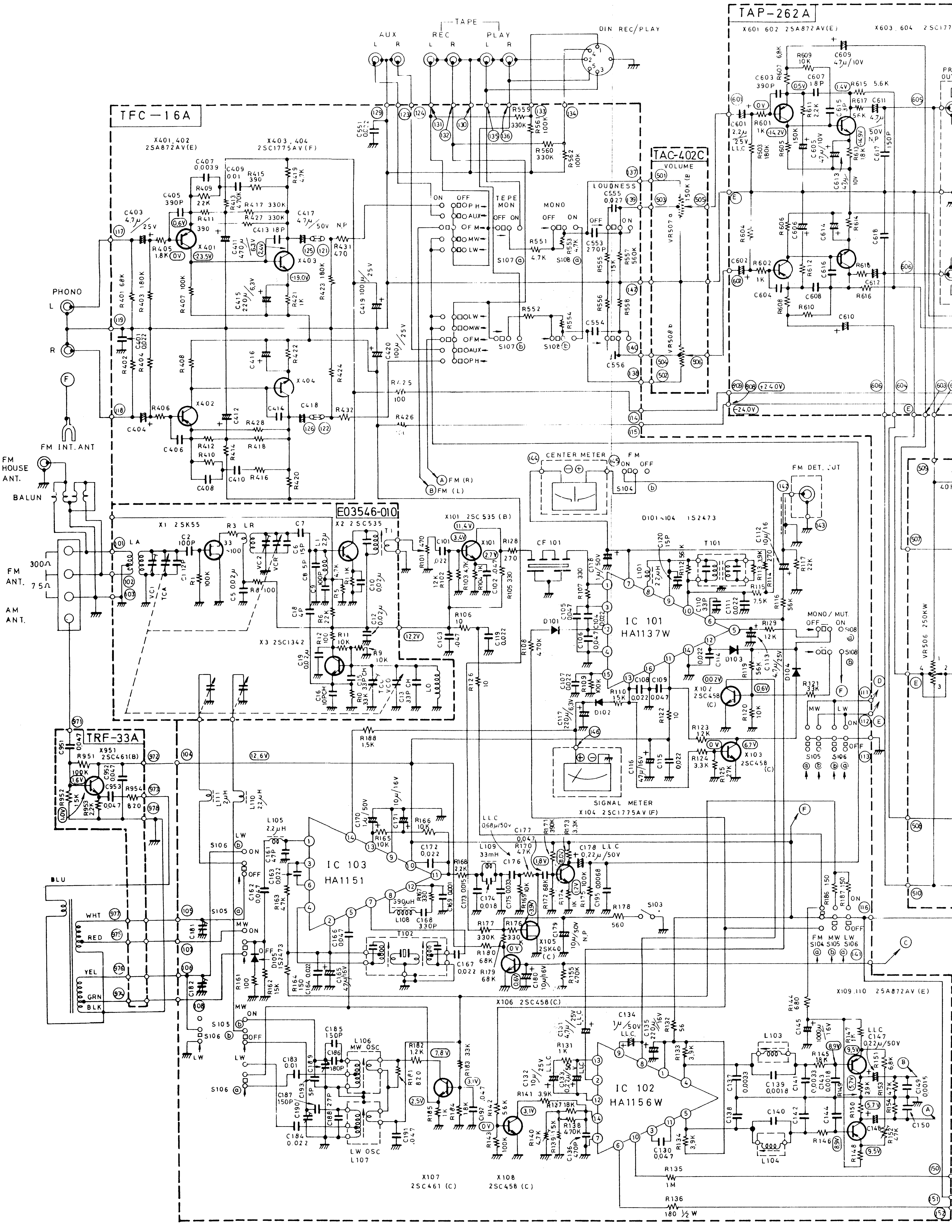

JR-S200L-PK
Carton Box

Fig. 33

10. Accessories List

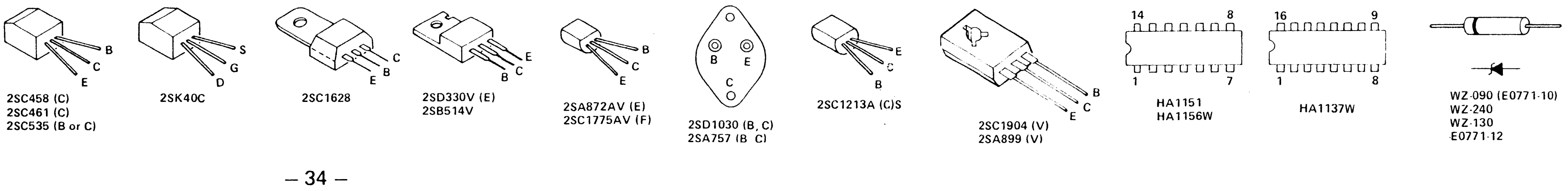
Part Number	Description	Q'ty
E30580-522A	Instruction Book	1
E64207-002	Envelope (for Instruction Book)	1

11. Schematic Diagram for Europe

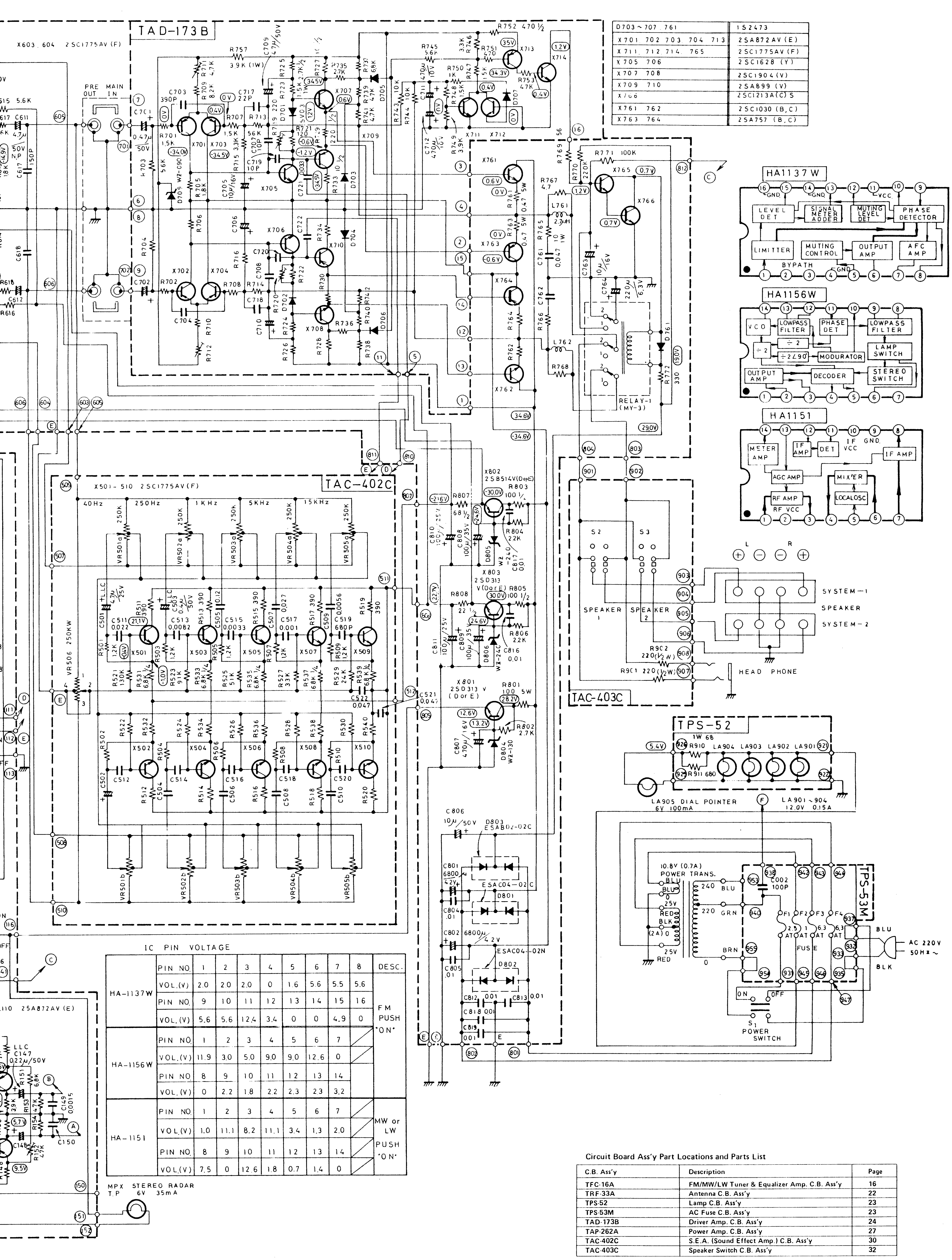


AUX
TAPE
REC
PLAY
DIN REC/PLAY
TFC-16A
X401, 402 2SA872AV(E)
X403, 404 2SC1775AV(F)
PHONO
TAC-402C
VOLUME
LOUDNESS
MONO
TEPE MON
TAP-262A
X601 602 2SA872AV(E)
E03546-010
X1 2SK55
X2 2SC535
X3 2SC1342
X101 2SC535 (B)
CF 101
T101
IC 101 HA1137W
D101~104 1S2473
X102 2SC458 (C)
X103 2SC458 (C)
CENTER METER
SIGNAL METER
X104 2SC1775AV (F)
FM DET. OUT
MONO / MUT.
VR506 50KW
FM INT. ANT
FM HOUSE ANT.
BALUN
FM ANT. 300Ω 75Ω
AM ANT.
TRF-33A
X951 2SC461(B)
IC 103 HA1151
X105 2SK40(C)
X106 2SC458(C)
IC 102 HA1156W
X107 2SC461 (C)
X108 2SC458 (C)
X109, 110 2SA872AV (E)
LW OSC L107
MW OSC
S104 S105 S106
FM MW LW

Transistor, I.C. and Diode Lead Identification



2SC458 (C)
2SC461 (C)
2SC535 (B or C)
2SK40C
2SC1628
2SD330V (E)
2SB514V
2SA872AV (E)
2SC1775AV (F)
2SD1030 (B, C)
2SA757 (B C)
2SC1213A (C)S
2SC1904 (V)
2SA899 (V)
HA1151
HA1156W
HA1137W
WZ-090 (E0771-10)
WZ-240
WZ-130
E0771-12


TAD-173B
X603 604 2SC1775AV (F)
PRE OUT
MAIN IN
TAC-402C
X501-510 2SC1775AV (F)
40Hz
250Hz
1KHz
5KHz
15KHz
TAC-403C
SPEAKER 1
SPEAKER 2
SYSTEM-1
SPEAKER
SYSTEM-2
HEAD PHONE
RELAY-1 (MY-3)
HA1137W
LEVEL DET
SIGNAL METER ADDER
MUTING LEVEL DET
PHASE DETECTOR
LIMITTER
MUTING CONTROL
OUTPUT AMP
AFC AMP
BYPATH
HA1156W
VCO
LOWPASS FILTER
PHASE DET
LAMP SWITCH
MODURATOR
OUTPUT AMP
DECODER
STEREO SWITCH
HA1151
METER AMP
IF AMP
DET
AGC AMP
MIX'ER
RF AMP
LOCALOSC
TPS-52
LA905 DIAL POINTER 6V 100mA
LA901~904 12.0V 0.15A
TPS-53M
10.8V (0.7A) POWER TRANS.
AC 220V 50Hz~
POWER SWITCH
MPX T.P
STEREO RADAR 6V 35mA
X110 2SA872AV (E)

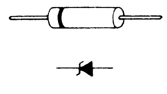
D703~707 761	1S2473
X701 702 703 704 713	2SA872AV (E)
X711 712 714 765	2SC1775AV (F)
X705 706	2SC1628 (Y)
X707 708	2SC1904 (V)
X709 710	2SA899 (V)
X766	2SC1213A(C) S
X761 762	2SC1030 (B, C)
X763 764	2SA757 (B, C)

IC PIN VOLTAGE

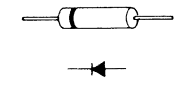
	PIN NO.	1	2	3	4	5	6	7	8	DESC.
HA-1137W	VOL.(V)	2.0	2.0	2.0	0	1.6	5.6	5.5	5.6	FM PUSH "ON"
	PIN NO.	9	10	11	12	13	14	15	16	
	VOL.(V)	5.6	5.6	12.4	3.4	0	0	4.9	0	
HA-1156W	PIN NO.	1	2	3	4	5	6	7		
	VOL.(V)	11.9	3.0	5.0	9.0	9.0	12.6	0		
	PIN NO.	8	9	10	11	12	13	14		
	VOL.(V)	0	2.2	1.8	2.2	2.3	2.3	3.2		
HA-1151	PIN NO.	1	2	3	4	5	6	7		MW or LW PUSH "ON"
	VOL.(V)	1.0	11.1	8.2	11.1	3.4	1.3	2.0		
	PIN NO.	8	9	10	11	12	13	14		
	VOL.(V)	7.5	0	12.6	1.8	0.7	1.4	0		

Circuit Board Ass'y Part Locations and Parts List

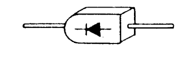
C.B. Ass'y	Description	Page
TFC-16A	FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y	16
TRF-33A	Antenna C.B. Ass'y	22
TPS-52	Lamp C.B. Ass'y	23
TPS-53M	AC Fuse C.B. Ass'y	23
TAD-173B	Driver Amp. C.B. Ass'y	24
TAP-262A	Power Amp. C.B. Ass'y	27
TAC-402C	S.E.A. (Sound Effect Amp.) C.B. Ass'y	30
TAC-403C	Speaker Switch C.B. Ass'y	32



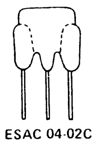
WZ-090 (E0771-10)
WZ-240
WZ-130
E0771-12



1S188FM
1S2473F



SV-03

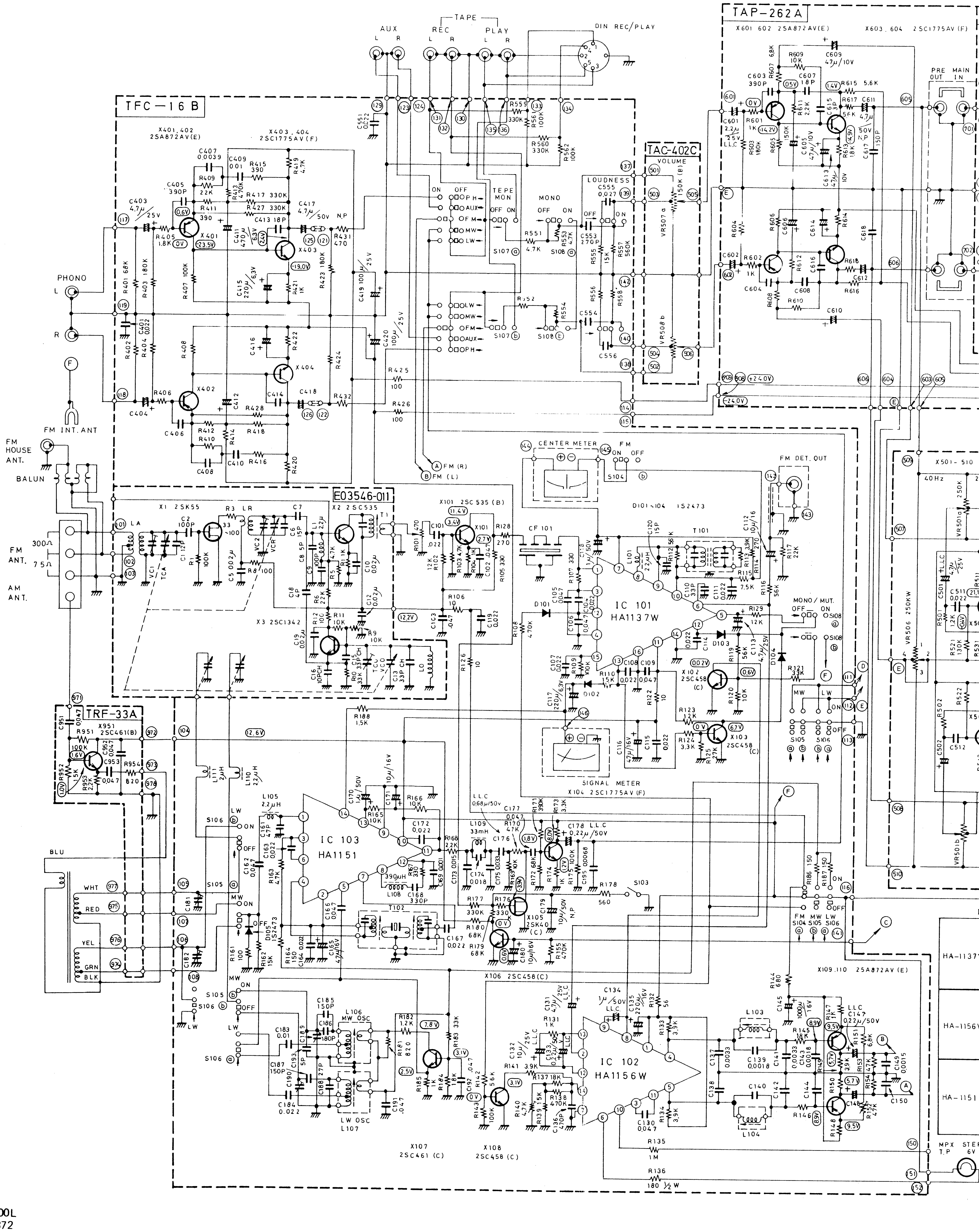


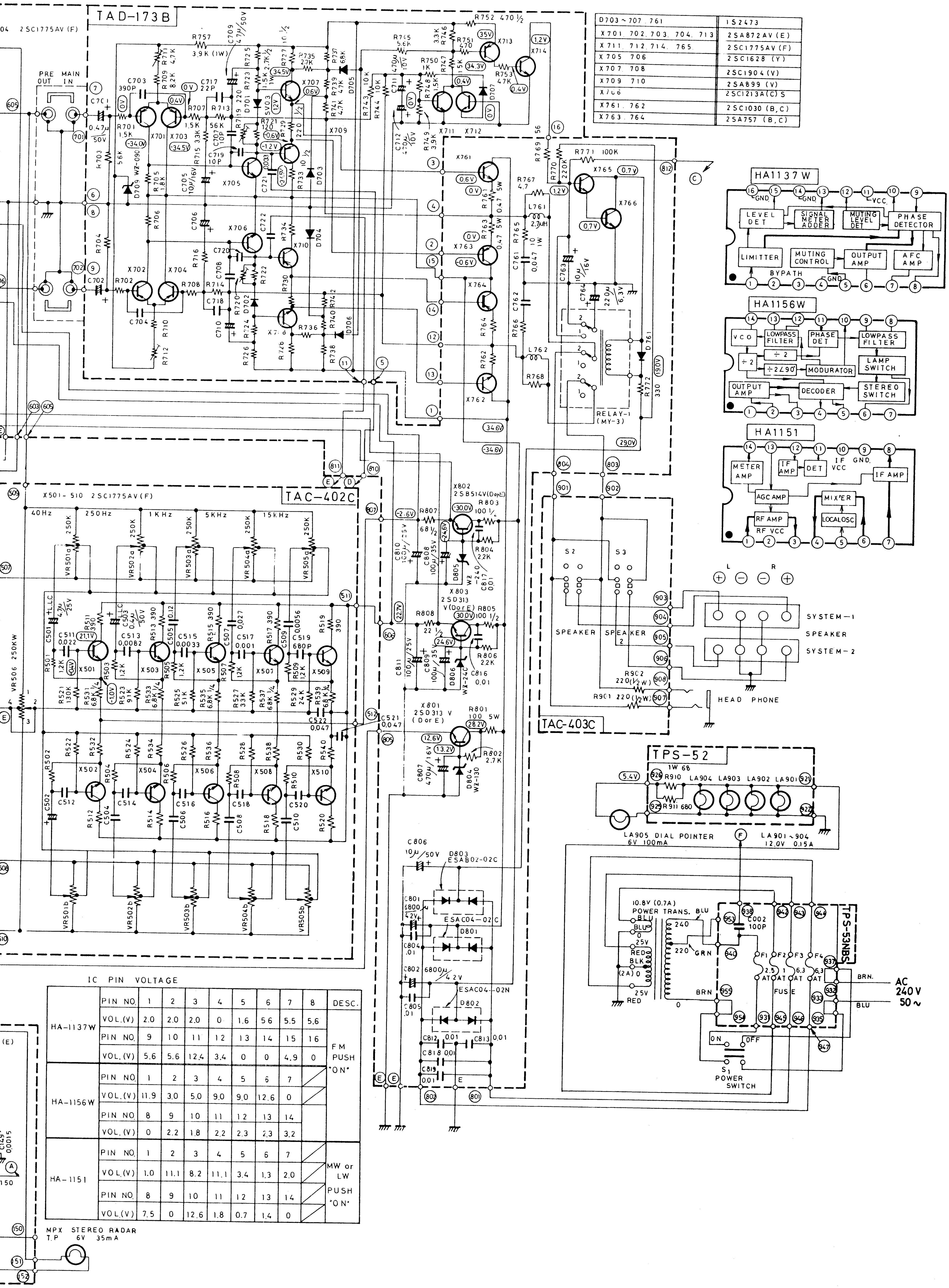
ESAC 04-02C
ESAC 04-02N
ESAB 02-02C

Precaution

After replacement of output and driver transistors, check the bias adjustment (see power amplifier adjustment on page 13).

12. Schematic Diagram for U.K.


TFC-16B
TAC-402C
TAP-262A
E03546-011
TRF-33A
AUX
TAPE
REC
PLAY
DIN REC/PLAY
PHONO
FM INT. ANT
FM HOUSE ANT.
BALUN
FM ANT.
AM ANT.
X401, 402 2SA872AV(E)
X403, 404 2SC1775AV(F)
X601 602 2SA872AV(E)
X603, 604 2SC1775AV(F)
PRE OUT
MAIN IN
LOUDNESS
VOLUME
MONO
TEPE MON
CENTER METER
SIGNAL METER
FM DET. OUT
MONO/MUT.
X1 2SK55
X2 2SC535
X3 2SC1342
X101 2SC535(B)
X951 2SC461(B)
D101~104 1S2473
IC 101 HA1137W
IC 103 HA1151
IC 102 HA1156W
X102 2SC458(C)
X103 2SC458(C)
X104 2SC1775AV(F)
X105 2SK40(C)
X106 2SC458(C)
X107 2SC461(C)
X108 2SC458(C)
X109, 110 2SA872AV(E)
X501-510
MW OSC
LW OSC
MPX T.P
HA-1137
HA-1156
HA-1151

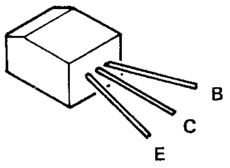

TAD-173B
TAC-402C
TAC-403C
TPS-52
TPS-53NBS
HA1137W
HA1156W
HA1151
X501 ~ 510 2SC1775AV (F)
PRE OUT
MAIN IN
LEVEL DET
SIGNAL METER ADDER
MUTING LEVEL DET
PHASE DETECTOR
LIMITTER
MUTING CONTROL
OUTPUT AMP
AFC AMP
BYPATH
VCO
LOWPASS FILTER
PHASE DET
LAMP SWITCH
MODURATOR
DECODER
STEREO SWITCH
METER AMP
IF AMP
DET
AGC AMP
MIX'ER
RF AMP
LOCALOSC
RF VCC
IF GND
VCC
GND
RELAY-1 (MY-3)
SPEAKER SYSTEM-1
SPEAKER SYSTEM-2
HEAD PHONE
LA905 DIAL POINTER 6V 100mA
LA901 ~ 904 12.0V 0.15A
POWER TRANS.
FUSE
S1 POWER SWITCH
ON
OFF
AC 240V 50 ~
BRN.
BLU
MPX STEREO RADAR T.P 6V 35mA

D703 ~ 707, 761	1S2473
X701, 702, 703, 704, 713	2SA872AV (E)
X711, 712, 714, 765	2SC1775AV (F)
X705 706	2SC1628 (Y)
X707, 708	2SC1904 (V)
X709 710	2SA899 (V)
X766	2SC1213A(C) S
X761, 762	2SC1030 (B, C)
X763, 764	2SA757 (B, C)

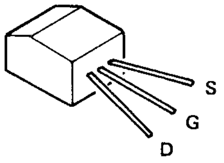
IC PIN VOLTAGE

HA-1137W	PIN NO.	1	2	3	4	5	6	7	8	DESC.
	VOL.(V)	2.0	2.0	2.0	0	1.6	5.6	5.5	5.6	FM PUSH "ON"
	PIN NO.	9	10	11	12	13	14	15	16	
	VOL.(V)	5.6	5.6	12.4	3.4	0	0	4.9	0	
HA-1156W	PIN NO.	1	2	3	4	5	6	7		
	VOL.(V)	11.9	3.0	5.0	9.0	9.0	12.6	0		
	PIN NO.	8	9	10	11	12	13	14		
	VOL.(V)	0	2.2	1.8	2.2	2.3	2.3	3.2		
HA-1151	PIN NO.	1	2	3	4	5	6	7		MW or LW PUSH "ON"
	VOL.(V)	1.0	11.1	8.2	11.1	3.4	1.3	2.0		
	PIN NO.	8	9	10	11	12	13	14		
	VOL.(V)	7.5	0	12.6	1.8	0.7	1.4	0		

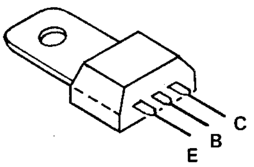
13. Transistor, I.C. and Diode Lead Identification



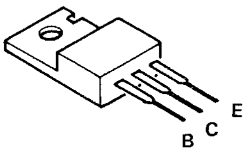
2SC458 (C)
2SC461 (C)
2SC535 (B or C)



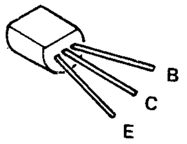
2SK40C



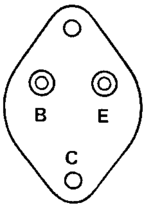
2SC1628



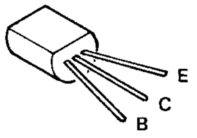
2SD313V (D, E)
2SB514V (D, E)



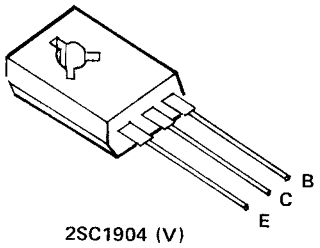
2SA872AV (E)
2SC1775AV (F)



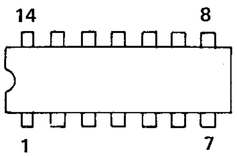
2SD1030 (B, C)
2SA757 (B, C)



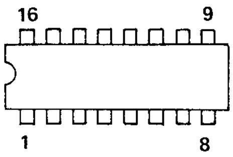
2SC1213A (C)S



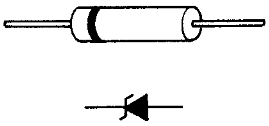
2SC1904 (V)
2SA899 (V)



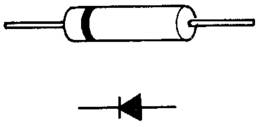
HA1151
HA1156W



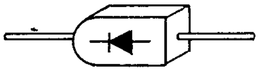
HA1137W



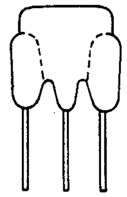
WZ-090 (E0771-10)
WZ-240
WZ-130
E0771-12



1S188FM
1S2473F



SV-03



ESAC 04-02C
ESAC 04-02N
ESAB 02-02C

14. Parts List with Specified Numbers for U.K

Page	Item No.	Description	Original	For U.K.
5	8	Power Switch	QSP2111-011	QSP2111-011BS
6	10	Power Cord	QMP9017-007	QMP9017-007BS
6	9	Power Cord Stopper	QHS3876-162	QHS3876-162BS
23	8-(4)	Fuse (Primary) 2.5A	QMF51A2-2R5	QMF51A2-2R5BS
23	8-(4)	Fuse (Secondary) 1A	QMF51A2-1R0	QMF51A2-1R0BS
23	8-(4)	Fuse (Protection) 6.3A	QMF51A2-6R3	QMF51A2-6R3BS
4	3	Power Transformer	E03077-20C	E03077-20CBS
23	8-(4)	AC Fuse C.B. Ass'y	TPS-53M	TPS-53NBS
16	8-(1)	FM/MW/LW Tuner & Equalizer Amp. C.B. Ass'y	TFC-16A	TFC-16B
21	8-(1)	Front-end (Tuner)	E03546-010	E03546-011
33	10	Instruction Book Warranty Card	E30580-522A	E30580-523ABS BT20013